



Albert Solé Ribalta

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Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

Albert Solé Ribalta obtained the degree in Computer Science and the Master in Artificial Intelligence in 2007, both from the Universitat Rovira i Virgili. In 2012, he obtained the PhD in Computer Science from the same university. The PhD was developed between 2008 and 2012 and addressed the development of multiple graph matching algorithms. Among other appointments during the PhD, he taught at the Department of Computer Science and Mathematics and did a visiting of 9 months at the Università Ca' Foscari Venezia (Italy). After the PhD, he joined the Alephsys Lab (Algorithms Embedded in Physical Systems) under the supervision of Prof. Alex Arenas, where he learned the fundamentals of complex system. During the 4-year duration of the post-doctoral scholarship, he has contributed to the foundation of Multiplex networks with special attention to centrality measures, dynamical processes, and urban science. In 2016, Albert joined the CoSIN3 research group at the Universitat Oberta de Catalunya where he assisted the group leader, Dr. Borge Holthoefer, to position CoSIN3 to the forefront of complex systems research. After 3 years in the institution, he obtained a professor position at the Department of Computer Science, combined with a visiting professor stay at the Universität Zürich with Prof. Claudio Tessone. During his academic career, Albert has worked on several research areas under the umbrella of network science: computational social sciences, urban science, human and urban ecology, community ecology and dynamical processes on complex networks. His scientific contributions have been published in several high impact journals which include: PNAS, Physical Review X, Physical Review L, Nature Communications, or PNAS Nexus, but also in specialized journals such as Networks and Spatial Economics, Transportation Research Part C, Urban Climate or Cities, among others. His scientific metrics add up to more than 50 peer-reviewed works that accumulate more than 4300 citations, H-Index of 25, with 8 articles with more than 100 citations. Albert has also received multiple awards, which include the 2024 Web Science Trust Test of Time Award from the Web Science Trust (WST) and two times the "Premi Cross, Inter, and Trans-disciplinary Collaborations" from the Universitat Oberta de Catalunya in 2022 and 2024. Furthermore, his work has been discussed in more than 40 conferences, including the most important ones in complex systems: Conference on Complex Systems, NetSci, CompleNet. Some of these scientific contributions have transcended the academic sphere and have captured the attention of media --newspapers, radio.

He has also been involved in many Spanish and European projects as a research member, and he has acted as a PI in a Fundació "La Caixa" project (2022-23), and a co-PI in AGORAS (AEI, PID2021-128966NB-I00). Albert has also strong compromise with the scientific community: he is elected member of the council of the Complex System Society, member of Complexitat.cat and COMSOTEC, together with his activity as a reviewer in high-impact journals (e.g., Physical Review L, Physical Review E, Environment and Planning B, among many others). He has also organized several national and international conferences (Data Science in/for Barcelona 2022 and 2023, Comsotec



2022, VI Jornades de Complexitat and CCS'20 "Satellite Workshop on Computational Social Science"). Finally, it is worth also citing his involvement in training master, PhD students, and post-doctoral researchers. He has directed 16 final master thesis, one PhD student, Maria Palazzi (who obtained the Wagensberg Prize from Complexitat.cat) and he is currently directing 3 PhD students, of which 2 will read the PhD thesis in spring 2025.

B.1. Breve descripción del Trabajo de Fin de Grado (TFG) y puntuación obtenida

B.2. Breve descripción del Trabajo de Fin de Máster (TFM) y puntuación obtenida



General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

Quality indexes:

GOOGLE SCHOLAR (Albert Solé-Ribalta)

-citas totales: 4486

-índice-h: 26

Science outreach:

Check list at: https://drive.google.com/file/d/1Ltnw1lwLR80zZioH_gkuMPc9ysG881qr/view?usp=sharing

Albert Solé Ribalta

Surname(s): **Solé Ribalta**
Name: **Albert**
ORCID: **0000-0002-2953-5338**
ScopusID: **35088805900**
Contact aut. region/reg.: **Catalonia**
Personal web page: **<https://scholar.google.es/citations?user=1Dn1pSgAAAAJ&hl=en>**

Current professional situation

- 1** **Employing entity:** COMPLEXITAT (Catalan Network for the Study of Complex Systems)
Professional category: Board Member / Vocal
Start date: 01/10/2022
Identify key words: Physics - Complex systems
- 2** **Employing entity:** COMSOTEC (Asociación para el estudio de Sistemas Complejos Sociotecnológicos)
Professional category: Board Member / Vocal
Start date: 01/05/2022
Identify key words: Physics - Complex systems
- 3** **Employing entity:** Complex Systems Society **Type of entity:** Associations and Groups
Professional category: Elected Council Member
Start date: 01/01/2022
Type of contract: Civil servant **Dedication regime:** Part time
Identify key words: Physics - Complex systems
- 4** **Employing entity:** Universitat Oberta de Catalunya **Type of entity:** University
Department: Estudios de Informática, Multimedia y Telecomunicación, Internet Interdisciplinary Institute
Professional category: Profesor Agregado
City employing entity: Spain
Phone: (+34) 600410227
Start date: 01/06/2019
Identify key words: Algorithms; Physics - Complex systems

Previous positions and activities

	Employing entity	Professional category	Start date
1	Universitat Oberta de Catalunya	Post-doctoral Student	01/10/2016
2	Universitat Rovira i Virgili	Investigador ordinario	04/02/2013

	Employing entity	Professional category	Start date
3	Universitat Oberta de Catalunya	Escritura de material docente	2012
4	Universitat Rovira i Virgili	Profesor asociado	2012
5	Universitat Rovira i Virgili	Becario Predoctoral	01/09/2009
6	Universitat Rovira i Virgili	Professor asociado	2005
7	Grup Micros	Software developer	2008
8	Universitat Rovira i Virgili	Becario de proyecto (K4Care)	2006
9	Universitat Rovira i Virgili	Becario de proyecto (Coordinated Exploration of Wide-Area Environments with Multiple Robots Through Vision-Based 3D SLAM)	2005

- Employing entity:** Universitat Oberta de Catalunya
Professional category: Post-doctoral Student
Start-End date: 01/10/2016 - 01/06/2019
Type of entity: University
- Employing entity:** Universitat Rovira i Virgili
Department: Universitat Rovira i Virgili, Universitat Rovira i Virgili
City employing entity: Tarragona,
Professional category: Investigador ordinario
Start-End date: 04/02/2013 - 30/09/2016
Type of contract: Grant-assisted student (pre or post-doctoral, others)
- Employing entity:** Universitat Oberta de Catalunya
Professional category: Escritura de material docente
Start-End date: 2012 - 2013
Type of entity: University
- Employing entity:** Universitat Rovira i Virgili
Professional category: Profesor asociado
Start-End date: 2012 - 2013
Type of entity: University
- Employing entity:** Universitat Rovira i Virgili
Professional category: Becario Predoctoral
Start-End date: 01/09/2009 - 01/09/2012
Duration: 4 years
Type of entity: University
- Employing entity:** Universitat Rovira i Virgili
Professional category: Professor asociado
Start-End date: 2005 - 2011
Type of entity: University
- Employing entity:** Grup Micros
Professional category: Software developer
Start-End date: 2008 - 2009
- Employing entity:** Universitat Rovira i Virgili
Professional category: Becario de proyecto (K4Care)
Start-End date: 2006 - 2008
Type of entity: University

**C****V****n**

CURRÍCULUM VÍTAE NORMALIZADO

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9**Employing entity:** Universitat Rovira i Virgili**Type of entity:** University**Professional category:** Becario de proyecto (Coordinated Exploration of Wide-Area Environments with Multiple Robots Through Vision-Based 3D SLAM)**Start-End date:** 2005 - 2005**Duration:** 6 months



Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

- 1** **University degree:** Higher degree
Name of qualification: Master Universitario en Inteligencia Artificial
Degree awarding entity: Universitat Rovira i Virgili **Type of entity:** University
Date of qualification: 31/07/2007
- 2** **University degree:** Higher degree
Name of qualification: Ingeniero Superior en Informática
Degree awarding entity: Universitat Rovira i Virgili **Type of entity:** University
Date of qualification: 07/06/2007
- 3** **University degree:** Middle degree
Name of qualification: Ingeniero informático de sistemas
Degree awarding entity: Universitat Rovira i Virgili **Type of entity:** University
Date of qualification: 01/10/2004

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Ingeniería Informática
Degree awarding entity: Universitat Rovira i Virgili **Type of entity:** University
Date of degree: 11/07/2012

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
Italian		A1	A1	A1	
Catalan		C1	C1	C1	C1
Spanish		C1	C1	C1	C1
English		C1	C1	C1	C1

Teaching experience



General teaching experience

- 1** **Name of the course:** 22.419 Análisis en entornos de Big Data
University degree: B.S. Ciencia de Datos Aplicada (22.419) - Ongoing
Start date: 01/09/2021 **End date:** 01/01/2024
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 2** **Name of the course:** B0.475 Fundamentos de inteligencia de negocio
University degree: MSc. Inteligencia de Negocio y Big Data (B0.475) - Ongoing
Start date: 15/10/2020 **End date:** 01/01/2024
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 3** **Name of the course:** B0.485 Tecnologías de Batch Processing
University degree: MSc. Inteligencia de Negocio y Big Data (B0.485) - Ongoing
Start date: 15/10/2020 **End date:** 01/01/2024
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 4** **Name of the course:** B0.486 Tecnologías de Stream Processing
University degree: MSc. Inteligencia de Negocio y Big Data (B0.486) - Ongoing
Start date: 15/10/2020 **End date:** 01/01/2024
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 5** **Name of the course:** B0.476 Fundamentos de Big Data
University degree: MSc. Inteligencia de Negocio y Big Data (B0.476) - Ongoing
Start date: 15/10/2020 **End date:** 01/01/2024
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 6** **Name of the course:** B0.487 TFM (Analista de datos)
University degree: MSc. Inteligencia de Negocio y Big Data (B0.487) - Ongoing
Start date: 15/10/2020 **End date:** 01/01/2024
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 7** **Name of the course:** M2.858 Análisis de datos en entornos Big Data
University degree: MSc. Ciencia de Datos (M2.858) - Ongoing
Start date: 15/10/2020 **End date:** 01/01/2024
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 8** **Name of the course:** M2.878/882 TFM - Área 1 / 5
University degree: MSc. Ciencia de Datos (M2.878/M2.882) - Ongoing
Start date: 15/10/2020 **End date:** 01/01/2024
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 9** **Name of the course:** Estructures de dades
University degree: Grau d'Enginyeria Informàtica
Start date: 01/02/2021 **End date:** 01/06/2021
Entity: Universitat Rovira i Virgili **Type of entity:** University



- 10** **Name of the course:** Fonaments de programació I
University degree: Grau d'Enginyeria Informàtica
Start date: 01/09/2020 **End date:** 01/02/2021
Entity: Universitat Rovira i Virgili **Type of entity:** University
- 11** **Name of the course:** Anàlisi de dades amb BIG Data - CFCC
University degree: UOC-Consultor fc-Programas abiertos
Start date: 25/12/2019 **End date:** 26/06/2020
Entity: UOC Corporate
- 12** **Name of the course:** B0.475 Fundamentos de inteligencia de negocio
University degree: Máster de Inteligencia de Negocio y Big Data (B0.475)
Start date: 15/02/2020 **End date:** 15/06/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 13** **Name of the course:** B0.476 Fundamentos de Big Data
University degree: Máster de Inteligencia de Negocio y Big Data (B0.476)
Start date: 15/02/2020 **End date:** 15/06/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 14** **Name of the course:** B2.585 Tecnologías de Big data
University degree: Máster de Inteligencia de Negocio y Big Data (B2.585)
Start date: 15/02/2020 **End date:** 15/06/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 15** **Name of the course:** B2.592 TFM Análisis de negocio
University degree: Máster de Inteligencia de Negocio y Big Data (B2.592)
Start date: 15/02/2020 **End date:** 15/06/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 16** **Name of the course:** M2.858 Análisis de datos en entornos Big Data
University degree: Máster universitario de Ciencia de Datos (M2.858)
Start date: 15/02/2020 **End date:** 15/06/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 17** **Name of the course:** M2.878 TFM - Àrea 1
University degree: Máster universitario de Ciencia de Datos (M2.878)
Start date: 15/02/2020 **End date:** 15/06/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 18** **Name of the course:** M2.882 TFM - Àrea 5
University degree: Máster universitario de Ciencia de Datos (M2.882)
Start date: 15/02/2020 **End date:** 15/06/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 19** **Name of the course:** Estructures de dades
University degree: Grau d'Enginyeria Informàtica
Start date: 01/02/2020 **End date:** 01/06/2020
Entity: Universitat Rovira i Virgili **Type of entity:** University



- 20** **Name of the course:** B0.475 Fundamentos de inteligencia de negocio
University degree: Máster de Inteligencia de Negocio y Big Data (B0.475)
Start date: 15/09/2019 **End date:** 15/02/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 21** **Name of the course:** Fonaments de programació I
University degree: Grau d'Enginyeria Informàtica
Start date: 01/09/2019 **End date:** 01/02/2020
Entity: Universitat Rovira i Virgili **Type of entity:** University
- 22** **Name of the course:** B0.476 Fundamentos de Big Data
University degree: Máster de Inteligencia de Negocio y Big Data (B0.476)
Start date: 15/09/2019 **End date:** 15/01/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 23** **Name of the course:** M2.882 TFM - Área 5
University degree: Máster universitario de Ciencia de Datos (M2.882)
Start date: 15/09/2019 **End date:** 15/01/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 24** **Name of the course:** B2.585 Tecnologías de Big data
University degree: Máster de Inteligencia de Negocio y Big Data (B2.585)
Start date: 15/09/2019 **End date:** 15/01/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 25** **Name of the course:** B2.592 TFM Análisis de negocio
University degree: Máster de Inteligencia de Negocio y Big Data (B2.592)
Start date: 15/09/2019 **End date:** 15/01/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 26** **Name of the course:** M2.858 Análisis de datos en entornos Big Data
University degree: Máster universitario de Ciencia de Datos (M2.858)
Start date: 15/09/2019 **End date:** 15/01/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 27** **Name of the course:** M2.878 TFM - Área 1
University degree: Máster universitario de Ciencia de Datos (M2.878)
Start date: 15/09/2019 **End date:** 15/01/2020
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 28** **Name of the course:** M2.969 TFM-Minería de datos y machine learning
University degree: Máster universitario de Ciencia de Datos (M2.969)
Start date: 15/02/2019 **End date:** 15/06/2019
Entity: Universitat Oberta de Catalunya **Type of entity:** University
- 29** **Name of the course:** Sistemas Operativos
University degree: Enginyeria Telemàtica, Ingenieria técnica en informática de gestión, Ingenieria técnica en informática de sistemas
Start date: 2010 **End date:** 2011
Entity: Universitat Rovira i Virgili **Type of entity:** University



- 30** **Name of the course:** Sistemas Operativos
University degree: Enginyeria Telemàtica, Ingeniería técnica en informática de gestión, Ingeniería técnica en informática de sistemas
Start date: 2009 **End date:** 2010
Entity: Universitat Rovira i Virgili **Type of entity:** University
- 31** **Name of the course:** Sistemas Operativos
University degree: Enginyeria Telemàtica, Ingeniería técnica en informática de gestión, Ingeniería técnica en informática de sistemas
Start date: 2008 **End date:** 2009
Entity: Universitat Rovira i Virgili **Type of entity:** University
- 32** **Name of the course:** Programacion II
University degree: Enginyeria Telemàtica, Ingeniería técnica en informática de gestión, Ingeniería técnica en informática de sistemas
Start date: 2007 **End date:** 2008
Entity: Universitat Rovira i Virgili **Type of entity:** University
- 33** **Name of the course:** Sistemas Operativos
University degree: Enginyeria Telemàtica, Ingeniería técnica en informática de gestión, Ingeniería técnica en informática de sistemas
Start date: 2007 **End date:** 2008
Entity: Universitat Rovira i Virgili **Type of entity:** University
- 34** **Name of the course:** Programacion I
University degree: Enginyeria Telemàtica, Ingeniería técnica en informática de gestión, Ingeniería técnica en informática de sistemas
Start date: 2006 **End date:** 2007
Entity: Universitat Rovira i Virgili **Type of entity:** University
- 35** **Name of the course:** Programacion II
University degree: Enginyeria Telemàtica, Ingeniería técnica en informática de gestión, Ingeniería técnica en informática de sistemas
Start date: 2006 **End date:** 2007
Entity: Universitat Rovira i Virgili **Type of entity:** University
- 36** **Name of the course:** Sistemas operativos
University degree: Enginyeria Telemàtica, Ingeniería técnica en informática de gestión, Ingeniería técnica en informática de sistemas
Start date: 2006 **End date:** 2007
Entity: Universitat Rovira i Virgili **Type of entity:** University
- 37** **Name of the course:** Sistemas operativos
University degree: Enginyeria Telemàtica, Ingeniería técnica en informática de gestión, Ingeniería técnica en informática de sistemas
Start date: 2005 **End date:** 2006
Entity: Universitat Rovira i Virgili **Type of entity:** University



Experience supervising doctoral thesis and/or final year projects

- 1** **Project title:** Msc. Evaluación automatizada de infraestructuras de movilidad sostenible mediante visión por computadora
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Javier Jiménez Gil
Obtained qualification: (pending)
Date of reading: 23/01/2025
- 2** **Project title:** Msc. Obtención y Análisis basado en la teoría de grafos de la estructura del Fediverso de Mastodon
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: David Villoria Delgado
Obtained qualification: (pending)
Date of reading: 23/01/2025
- 3** **Project title:** Msc. Previsió de les Eleccions Catalanes Mitjançant Dades Espacials
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Guillem Pla Bertran
Obtained qualification: 9.2
Date of reading: 01/07/2024
- 4** **Project title:** Msc. Deep Learning aplicado a imágenes de insectos polinizadores
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Vanesa García Fernández
Obtained qualification: 9
Date of reading: 01/01/2024
- 5** **Project title:** Msc. Detección de polinizadores a partir de imágenes utilizando redes neuronales convolucionales
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Andrés Merino Toapanta
Obtained qualification: 9.5
Date of reading: 01/01/2024
- 6** **Project title:** Msc. Anàlisi d'una xarxa urbana de carrils bici: el cas de Helsinki
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Joan Manuel López Ruiz
Obtained qualification: 9.3
Date of reading: 15/06/2023
- 7** **Project title:** Msc. Hodge Decomposition Applied to Geometric Random Walks for Pedestrian Mobility
Entity: Universitat de Barcelona **Type of entity:** University
Student: Robert Benassai
Obtained qualification: 9.5
Date of reading: 15/06/2023
- 8** **Project title:** MSc. Análisis de estacionamiento regulado en red urbana
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: José María Cano Hernández
Obtained qualification: 9.1



Date of reading: 15/02/2023

- 9** **Project title:** MSc. Análisis y clasificación de modos de transporte sobre trazas GPS de OpenStreetMap
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Juan Francisco Nieto Mendoza
Obtained qualification: 9.1
Date of reading: 15/02/2023
- 10** **Project title:** MSc. IA aplicada a la predicción de la valoración de empresas cotizadas en el mercado londinense
Entity: Universitat Oberta de Catalunya / Universitat Rovira i Virgili
Student: Héctor Borobia Aranda
Obtained qualification: 10
Date of reading: 15/09/2022
- 11** **Project title:** MSc. Análisis de los papeles de Panamá mediante la teoría de redes complejas
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Edgar Rubén Pardo
Obtained qualification: 9.3
Date of reading: 24/01/2022
- 12** **Project title:** MSc. Detección de bots en redes sociales
Entity: Universitat Rovira i Virgili **Type of entity:** University
Student: Pablo Higuera de la Iglesia
Date of reading: 01/09/2021
- 13** **Project title:** MSc. Centralidad de intermediación flexible sobre redes de transporte urbanas (Nota 10 - MH)
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Martín González Soto
Date of reading: 01/02/2021
- 14** **Project title:** PhD. Structural and dynamical interdependencies in complex networks at macro- and mesoscale: nestedness, modularity, and in-block nestedness. (Nota 10 - Cum Laude)
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Maria José Palazzi Nieves
Date of reading: 15/12/2020
- 15** **Project title:** MSc. Estudio de flujo en redes de transporte urbano
Entity: Universitat Rovira i Virgili **Type of entity:** University
Student: Jenny Aguirre Coba
Date of reading: 14/07/2019
- 16** **Project title:** MSc. Implicaciones de la similitud estructural en la dinàmica de redes ecològicas
Entity: Universitat Rovira i Virgili **Type of entity:** University
Student: Julia Martínez-Atienza Barthelemy
Date of reading: 14/07/2019
- 17** **Project title:** MSc. Nested communities in the Global Value Chain (Nota 9.7)
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Gerard Masllorens
Date of reading: 14/07/2019



- 18** **Project title:** PhD. (Ongoing) Analysis and Redesign of the Urban Scene with Explainable Deep Learning
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Cristina Bustos
- 19** **Project title:** PhD. (Ongoing) Human systems ecology: social and urban insights
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Harry Rios Romero
- 20** **Project title:** PhD. (Ongoing) Urban networks on a human scale: from sidewalk networks to new measures of accessibility
Entity: Universitat Oberta de Catalunya **Type of entity:** University
Student: Daniel Rhoads

Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

- 1** **Name of the project:** AGORAS: human complex system ecology in social and urban spaces
Name principal investigator (PI, Co-PI....): Javier Borge-Holthoefer; Albert Solé-Ribalta
Start-End date: 01/01/2022 - 31/12/2024
Total amount: 66.550 €
- 2** **Name of the project:** LIKE-BCN: social accessible, and walkable Barcelona (21S09383- 001)
Entity where project took place: FUNDACIO PER A LA UNIVERSITAT OBERTA DE CATALUNYA
Funding entity or bodies:
Obra Social Fundación la Caixa **Type of entity:** Foundation
Ajuntament de Barcelona **Type of entity:** Government
Name of the programme: Pla Barcelona Ciència
Code according to the funding entity: 21S09383- 001
Start-End date: 10/12/2021 - 10/06/2023
Total amount: 149.567,92 €
- 3** **Name of the project:** HYBRID PATTERNS IN UNI- AND MULTI-LAYER COMPLEX NETWORKS: THEORY AND APPLICATIONS
Type of project: Basic research (including archaeological digs, etc)
Entity where project took place: FUNDACIO PER A LA UNIVERSITAT OBERTA DE CATALUNYA
Name principal investigator (PI, Co-PI....): Javier Borge Holthoefer; Ivan Serrano
Nº of researchers: 3
Name of the programme: PROYECTOS I+D+i GENERACIÓN DE CONOCIMIENTO
Code according to the funding entity: PGC2018-096999-A-I00
Start-End date: 01/06/2019 - 31/05/2022
Total amount: 28.435 €



- 4** **Name of the project:** Towards an Ecological Approach of inforMation Systems TEAMS
Entity where project took place: Fondazione Cassa di Risparmio di Padova e Rovigo
Type of entity: Foundation
City of entity: Padova, Italy
Name principal investigator (PI, Co-PI....): Samir Suweis
Nº of researchers: 4
Start-End date: 01/12/2018 - 31/10/2019
Total amount: 30.000 €
- 5** **Name of the project:** Espacio Persona (SPIP2017-02263)
Entity where project took place: Universitat Oberta de Catalunya
Type of entity: University
Nº of researchers: 2
Funding entity or bodies: Dirección General de Tráfico
Type of entity: ---
City funding entity: Madrid, Community of Madrid, Spain
Start-End date: 15/11/2017 - 15/12/2018
Total amount: 49.987,44 €
- 6** **Name of the project:** Robot Human Task Cooperation in Urban Areas
Entity where project took place: Universitat Politècnica de Catalunya
Type of entity: University
City of entity: Barcelona, Catalonia, Spain
Nº of researchers: 10
Funding entity or bodies: Consejo Interinstitucional de Ciencia Y Tecnología (CICYT)
Start-End date: 2011 - 2013
Total amount: 348.480 €
Applicant's contribution: DPI 2010-17112
- 7** **Name of the project:** Image Matching and Retrieval for Human Identification and Robot Positioning
Entity where project took place: Universitat Rovira i Virgili
Type of entity: University
City of entity: Tarragona, Spain
Nº of researchers: 4
Start-End date: 2010 - 2012
Total amount: 5.936 €
Applicant's contribution: URV-2010AIRE/08
- 8** **Name of the project:** Multimodal Interaction in Pattern Recognition and Computer Vision
Entity where project took place: Universitat Politècnica de Catalunya
Type of entity: University
City of entity: Barcelona, Catalonia, Spain
Nº of researchers: 150
Funding entity or bodies: Consolider Ingenio 2010
Type of entity: State agency
City funding entity: Spain
Start-End date: 2007 - 2011
Total amount: 4.500.000 €
Applicant's contribution: Codigo proyecto: CSD2007-00018

- 9** **Name of the project:** K4CARE: Knowledge-based homecare e-Services for an ageing Europe
Entity where project took place: Universitat Rovira i Virgili
Type of entity: University
City of entity: Tarragona, Catalonia, Spain
Nº of researchers: 49
Funding entity or bodies: Research Directorate General, European Commission
Type of entity: Public Research Body
Start-End date: 2006 - 2008
Total amount: 3.700.000 €
Applicant's contribution: Codigo proyecto: IST-2004-026968
- 10** **Name of the project:** humAn complex system ecoloGy in sOcial and uRbAn Spaces (AGORAS)
Entity where project took place: FUNDACIO PER A LA UNIVERSITAT OBERTA DE CATALUNYA
Name principal investigator (PI, Co-PI....): Javier Borge Holthoefer; Albert Solé Ribalta
Nº of researchers: 7
Name of the programme: PROYECTOS I+D+i GENERACIÓN DE CONOCIMIENTO
Code according to the funding entity: PID2021-128966NB-I00
Start date: 01/09/2022
Total amount: 66.550 €
- 11** **Name of the project:** Plexmath
Entity where project took place: Universitat Rovira i Virgili
Type of entity: University
Name principal investigator (PI, Co-PI....): 1; Alex Arenas Moreno; Yamir Moreno; Mason Porter; James Gleeson; Mark Barthélemy
Nº of researchers: 22
Funding entity or bodies: Research and Innovation funding 2014-2020 FP7
Type of entity: University Research Institute
Start date: 04/02/2013

R&D non-competitive contracts, agreements or projects with public or private entities

- 1** **Name of the project:** Monitorización automática de insectos en entornos controlados: prototipo de un sistema de visión por computadora para las fases evolutivas de la especie *Hermetia illucens* (PhoenixFood)
Funding entity or bodies: Ministerio de Industria, Comercio y Turismo del Gobierno de España
Start date: 23/12/2024
Duration: 12 years
Total amount: 30.000 €
- 2** **Name of the project:** Avance en la Supervisión Ciclista: Prototipo de un Sistema de Visión por Computadora para la Evaluación Automatizada de Infraestructuras de Carriles Bici (LanePatrol)
Name principal investigator (PI, Co-PI....): Albert Solé-Ribalta
Funding entity or bodies: Ministerio de Industria, Comercio y Turismo del Gobierno de España
Start date: 12/06/2024
Duration: 12 years
Total amount: 30.000 €

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

- 1** Albert Solé-Ribalta; Javier Borge-Holthoefer; Robert Benassai-Dalmau. Exploring pedestrian permeability in urban sidewalk networks. *Chaos, Solitons & Fractals* (Perc. 97.5 - IF 5.3). 194 - 116114, 05/01/2025.
Type of production: Scientific paper
Total no. authors: 3
- 2** Clément Rames; Daniel Rhoads; Antoni Meseguer-Artola; Sergi Lozano; Javier Borge-Holthoefer; Albert Solé-Ribalta. Trends and drivers of pedestrian mobility in Barcelona: A fine-grained study across its commercial tissue. *Cities* (Perc. 94.2 - IF 6.0). 158, pp. 105655. Pergamon, 03/01/2025.
Type of production: Scientific paper
Format: Journal
- 3** Cristina Carnerero; Clément Rames; Álvaro Criado; Javier Borge-Holthoefer; Albert Soret; Albert Solé-Ribalta. City-scale assessment of pedestrian exposure to air pollution: A case study in Barcelona. *Urban Climate* (Perc. 89.5 - IF 6.0). 58, pp. 102183. Elsevier, 01/11/2024.
Type of production: Scientific paper
- 4** Rubén Rodríguez-Casañ; Elisabet Carbó-Catalan; Albert Solé-Ribalta; Diana Roig-Sanz; Javier Borge-Holthoefer; Alessio Cardillo. Analysing inter-state communication dynamics and roles in the networks of the International Institute of Intellectual Cooperation. *Humanities and Social Sciences Communications* (Perc. 95.2 - IF 3.7). Palgrave, 24/10/2024.
Type of production: Scientific paper
Format: Journal
- 5** Aniello Lampo; María J. Palazzi; Javier Borge-Holthoefer; Albert Solé-Ribalta. Structural dynamics of plant-pollinator mutualistic networks. *PNAS nexus* (IP - Pending). 3 - 6, Oxford Academic, 31/05/2024.
Type of production: Scientific paper
Format: Journal
Corresponding author: Yes
- 6** Daniel Rhoads; Clément Rames; Albert Solé-Ribalta; Marta González; Michael Szell; Javier Borge-Holthoefer. Sidewalk networks: Review and outlook. *Computers, Environment and Urban Systems* (Q1 - 6.5). 100, pp. 101936. 01/12/2023.
Type of production: Scientific paper
- 7** Daniel Rhoads; Albert Solé-Ribalta; Javier Borge-Holthoefer. The inclusive 15-minute city: Walkability analysis with sidewalk networks. *Computers, Environment and Urban Systems* (Q1 - 6.5). 100, pp. 101936. 01/03/2023.
Type of production: Scientific paper
- 8** Jordi Casas-Roma; Eloy Martinez-Heras; Albert Solé-Ribalta; Elisabeth Solana; Elisabet Lopez-Soley; Francesc Vivó; Marcos Diaz-Hurtado; Salut Alba-Arbalat; Maria Sepulveda; Yolanda Blanco; Albert Saiz; Javier Borge-Holthoefer; Sara Llufríu; Ferran Prados. Applying multilayer analysis to morphological, structural, and functional brain networks to identify relevant dysfunction patterns. *Network Neuroscience* (Q2 - 5.0). 6 - 3, pp. 916 - 933. 01/07/2022.
Type of production: Scientific paper

- 9** Agnello Lampo; Javier Borge-Holthoefer; Sergio Gómez; Albert Solé-Ribalta. Emergence of spatial transitions in urban congestion dynamics. *Applied Network Science* (JCI - Q2 - 0.5). 6 - 1, pp. 1 - 16. 01/12/2021.
Type of production: Scientific paper
- 10** Violeta Calleja-Solanas; Emanuele Pigani; María J Palazzi; Albert Solé-Ribalta; Samir Suweis; Javier Borge-Holthoefer; Sandro Meloni. Quantifying the drivers behind collective attention in information ecosystems. *Journal of Physics: Complexity* (IS-2.15). 4 - 1, pp. 1 - 12. 26/11/2021.
Type of production: Scientific paper
- 11** Daniel Rhoads; Albert Solé-Ribalta; Marta González; Javier Borge-Holthoefer. A sustainable strategy for open streets in (post) pandemic cities. *Communications Physics* (Q1 - 6.4). 4 - 1, pp. 183. 26/08/2021.
Type of production: Scientific paper
- 12** Cristina Bustos; Daniel Rhoads; Albert Solé-Ribalta; David Masip; Alex Arenas; Agata Lapedriza; Javier Borge-Holthoefer. Explainable, automated urban interventions to improve pedestrian and vehicle safety. *Transportation Research Part C: Emerging Technologies* (Q1 - 6.1). 125, pp. 103018. 01/04/2021.
Type of production: Scientific paper
- 13** María Palazzi; Albert Solé-Ribalta; Violeta Calleja-Solanas; Sandro Meloni; Carlos A Plata; Samir Suweis; Javier Borge-Holthoefer. An ecological approach to structural flexibility in online communication systems. *Nature communications* (Q1 - 12.1). 12 - 1, pp. 1 - 11. 29/03/2021.
Type of production: Scientific paper **Format:** Journal
- 14** Aniello Lampo; Javier Borge-Holthoefer; Sergio Gómez; Albert Solé-Ribalta. Multiple abrupt phase transitions in urban transport congestion. *Physical Review Research* (Perc. 77.1 - IF 3.5). 22/03/2021.
Type of production: Scientific paper
- 15** Manuel Mariani; María Palazzi; Albert Solé-Ribalta; Javier Borge-Holthoefer; Claudio Tessone. Absence of a resolution limit in in-block nestedness. *Communications in Nonlinear Science and Numerical Simulation* (Q1 - 4.1). 94 - 105545, 01/03/2021.
Type of production: Scientific paper **Format:** Journal
- 16** Carlos Plata; Emanuele Pigani; Violeta Calleja-Solanas; María Palazzi; Sandro Azaele; Albert Solé-Ribalta; Javier Borge-Holthoefer; Sandro Meloni; Samir Suweis. Neutral theory for competing attention in social networks. *Physical Review Research* (Perc. 77.1 - IF 3.5). 14/01/2021.
Type of production: Scientific paper
- 17** Daniel Rhoads; Ivan Serrano; Javier Borge-Holthoefer; Albert Solé-Ribalta. Measuring and mitigating behavioural segregation using Call Detail Records. *EPJ Data Science* (Q1 - 2.9). 9 - 1, 06/03/2020.
Type of production: Scientific paper
- 18** María Palazzi; Javier Borge-Holthoefer; Claudio Tessone; Albert Solé-Ribalta. Macro-and mesoscale pattern interdependencies in complex networks. *Journal of the Royal Society Interface* (Q1-1.6). 16 - 159, 30/10/2019.
Type of production: Scientific paper **Format:** Journal
- 19** María Palazzi; Jordi Cabot; Javier Luis Cánovas Izquierdo; Albert Solé-Ribalta; Javier Borge-Holthoefer. Online division of labour: emergent structures in open source software. *Scientific reports* (Q1 - 4.122). 9 - 1, pp. 1 - 11. 25/09/2019.
Type of production: Scientific paper **Format:** Journal
- 20** Albert Solé-Ribalta; Alex Arenas; Sergio Gómez. Effect of shortest path multiplicity on congestion of multiplex networks. *New Journal of Physics* (Q1-3.6). 21, 15/03/2019.
Type of production: Scientific paper **Format:** Journal

- 21** Albert Solé-Ribalta; Claudio Tessone; Manuel Mariani; Javier Borge-Holthoefer. Revealing In-Block Nestedness: detection and benchmarking. *Physical Review E* (Q1-2.3). 97 - 6, pp. 062302. American Physical Society, 2018.
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 22** Alex Arenas; Albert Solé-Ribalta; Sergio Gómez. La física de la congestión de tráfico. *Revista Española der Física*. 31 - 2, 15/06/2017. ISSN 0213-862X
Type of production: Scientific paper **Format:** Journal
- 23** Albert Solé-Ribalta; Sergio Gómez; Alex Arenas. Decongestion of urban areas with hotspot pricing. *Networks and Spatial Economics* (Q1-3.25). 18 - 1, pp. 33 - 50. 2017.
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 24** Albert Solé-Ribalta; Sergio Gómez; Alex Arenas. A model to identify urban traffic congestion hotspots in complex networks. *Royal Society Open Science* (Q2-2.2). 3 (10) - 160098, 10/10/2016.
Type of production: Scientific paper **Format:** Journal
- 25** Albert Solé-Ribalta; Manlio De Domenico; Sergio Gómez; Alex Arenas. Random walk centrality in interconnected multilayer networks. *Physica D: Nonlinear Phenomena* (Q1-1.51). 323-234, pp. 73 - 79. 01/06/2016.
Type of production: Scientific paper **Format:** Journal
- 26** Albert Solé-Ribalta; Sergio Gómez; Alex Arenas. Congestion Induced by the Structure of Multiplex Networks. *Physical Review Letters* (Q1-7.64). 116(10) - 108701, 10/03/2016.
Type of production: Scientific paper **Format:** Journal
- 27** Albert Solé Ribalta; Clara Granell Martorell; Alexandre Arenas Moreno; Sergio Gómez. Information transfer in community structured multiplex networks. *Frontiers in Physics* (Q1-3.6). 18/08/2015.
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
Relevant results: <http://dx.doi.org/10.3389/fphy.2015.00061>
- 28** Emanuele Cozzo; Mikko Kivelä; Manlio De Domenico; Albert Solé-Ribalta; Alex Arenas; Sergio Gómez; Mason Porter; Yamir Moreno. Structure of triadic relations in multiplex networks. *New Journal of Physics* (Q1-3.57). 17 (7) - 073029, 31/07/2015.
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 29** Albert Solé-Ribalta; Manlio De Domenico; Alex Arenas; Sergio Gómez. Random walk centrality in interconnected multilayer networks. *arXiv*. 23/06/2015. Available on-line at: <<http://arxiv.org/abs/1506.07165>>.
Type of production: Scientific paper **Format:** Journal
- 30** Manlio De Domenico; Albert Solé-Ribalta; Elisa Omodei; Sergio Gómez; Alex Arenas. Ranking in interconnected multilayer networks reveals versatile nodes. *Nature communications* (Q1-11.47). 6868, Nature Publishing Group, 23/04/2015.
Type of production: Scientific paper **Format:** Journal
- 31** Emanuele Cozzo; Mikko Kivelä; Manlio De Domenico; Albert Solé-Ribalta; Alex Arenas; Sergio Gómez; Mason APorter; Yamir Moreno. Structure of triadic relations in multiplex networks. *New Journal of Physics* (Q1-3.56). 17 - 7, pp. 073029 - 073029. 2015. Available on-line at: <<http://stacks.iop.org/1367-2630/17/i=7/a=073029>>.
Type of production: Scientific paper **Format:** Journal

- 32** Manlio De Domenico; Albert Solé-Ribalta; Sergio Gómez; Alex Arenas. Navigability of interconnected networks under random failures. Proceedings of the National Academy of Sciences (Q1-9.67). pp. 201318469 - 201318469. National Acad Sciences, 2014.
Type of production: Scientific paper **Format:** Journal
- 33** Albert SoléRibalta; David Sánchez; Montserrat Batet; Francesc Serratos. Towards the estimation of feature-based semantic similarity using multiple ontologies. KNOWLEDGE-BASED SYSTEMS (Q1-2.94). 55, pp. 101 - 113. 2014. Available on-line at: <<http://dx.doi.org/10.1016/j.knosys.2013.10.015>>.
Type of production: Scientific paper **Format:** Journal
- 34** Manlio De Domenico; Albert Solé-Ribalta; Elisa Omodei; Sergio Gómez; Alex Arenas. Centrality in Interconnected Multilayer Networks. CoRR. abs/1311.2906, 2013. Available on-line at: <<http://arxiv.org/abs/1311.2906>>.
Type of production: Scientific paper **Format:** Journal
- 35** Emanuele Cozzo; Mikko Kivelä; Manlio De Domenico; Albert Solé-Ribalta; Alex Arenas; Sergio Gómez; Mason A. Porter; Yamir Moreno. Clustering Coefficients in Multiplex Networks. CoRR. abs/1307.6780, 2013. Available on-line at: <<http://arxiv.org/abs/1307.6780>>.
Type of production: Scientific paper **Format:** Journal
- 36** Francesc Serratos; Xavier Cortés; Albert SoléRibalta. Component retrieval based on a database of graphs for Hand-Written Electronic-Scheme Digitalisation. EXPERT SYSTEMS WITH APPLICATIONS (Q1-2.2). 40 - 7, pp. 2493 - 2502. 2013. Available on-line at: <<http://dx.doi.org/10.1016/j.eswa.2012.10.071>>.
Type of production: Scientific paper **Format:** Journal
- 37** Albert Solé-Ribalta; Francesc Serratos. Graduated Assignment Algorithm for Multiple Graph Matching Based on a Common Labeling. International Journal of Pattern Recognition and Artificial Intelligence (Q4-0.67). 27 - 1, 2013. Available on-line at: <<http://dx.doi.org/10.1142/S0218001413500018>>.
Type of production: Scientific paper **Format:** Journal
- 38** Manlio De Domenico; Albert Solé-Ribalta; Emanuele Cozzo; Mikko Kivelä; Yamir Moreno; Mason A Porter; Sergio Gómez; Alex Arenas. Mathematical formulation of multilayer networks. Physical Review X (Q1-9.0). 3 - 4, pp. 041022 - 041022. American Physical Society, 2013.
Type of production: Scientific paper **Format:** Journal
- 39** Albert Solé-Ribalta; Manlio De Domenico; Nikos E Kouvaris; Albert Diaz-Guilera; Sergio Gomez; Alex Arenas. Spectral properties of the Laplacian of multiplex networks. Physical Review E (Q1-2.3). 88 - 3, pp. 032807 - 032807. American Physical Society, 2013.
Type of production: Scientific paper **Format:** Journal
- 40** David Sánchez; Albert Solé-Ribalta; Montserrat Batet; Francesc Serratos. Enabling semantic similarity estimation across multiple ontologies: An evaluation in the biomedical domain. Journal of Biomedical Informatics (Q1-2.1). 45 - 1, pp. 141 - 155. 2012. Available on-line at: <<http://dx.doi.org/10.1016/j.jbi.2011.10.005>>.
Type of production: Scientific paper **Format:** Journal
- 41** Albert Solé-Ribalta; Francesc Serratos; Alberto Sanfeliu. On the Graph Edit Distance Cost: Properties and Applications. International Journal of Pattern Recognition and Artificial Intelligence (Q4-0.67). 26 - 5, 2012. Available on-line at: <<http://dx.doi.org/10.1142/S021800141260004X>>.
Type of production: Scientific paper **Format:** Journal
- 42** Albert Solé-Ribalta; Francesc Serratos. Models and algorithms for computing the common labelling of a set of attributed graphs. Computer Vision and Image Understanding (Q2-1.5). 115 - 7, pp. 929 - 945. 2011. Available on-line at: <<http://dx.doi.org/10.1016/j.cviu.2010.12.007>>.

**Type of production:** Scientific paper**Format:** Journal

- 43** Ling Wu; Miguel Àngel García García; Domenec Puig Valls; Albert Solé Ribalta. Voronoi-based space partitioning for coordinated multi-robot exploration. Journal of Physical Agents. 1 - 1, Red de Agentes Físicos, 2007.

Type of production: Scientific paper**Format:** Journal

- 44** Daniel Rhoads; Javier Borge-Holthoefer; Albert Solé-Ribalta. Guide to Mobile Data Analytics in Refugee Scenarios. Measuring and mitigating behavioral segregation using Call Detail Records. Springer, 01/05/2019.

Type of production: Book chapter**Format:** Book

- 45** Sergio Gómez; Manlio De Domenico; Albert Solé-Ribalta; Elisa Omodei; Alex Arenas. Multilayer networks. Multiplex and Multilevel Networks. pp. 1 - 30. New York: Oxford University Press, 2018.

Type of production: Book chapter

- 46** David Isern; David Sánchez; Albert Solé-Ribalta; Antonio Moreno; László Varga. The K4Care Platform Design and Implementation. Ubiquitous health and medical informatics: the Ubiquity 2.0 trend and beyond. pp. 370 - 389. Medical Information Science Reference, 2010.

Type of production: Book chapter**Format:** Journal

Works submitted to national or international conferences

- 1** **Title of the work:** On the use of Vision-Language models for Visual Sentiment Analysis: a study on CLIP
Name of the conference: 2023 11th International Conference on Affective Computing and Intelligent Interaction (ACII)

City of event: Cambridge, MA,**Date of event:** 10/09/2023**Organising entity:** MIT Media Lab

Cristina Bustos; Carles Civit; Brian Du; Albert Solé-Ribalta; Agata Lapedriza.

- 2** **Title of the work:** The predictive value of the multilayer graph properties on clinical status in patients with multiple sclerosis

Name of the conference: 38th Congress of the European Committee for Treatment and Research in Multiple Sclerosis**Type of participation:** Participatory - oral communication**Corresponding author:** Yes**City of event:** Amsterdam / The Netherlands,**Date of event:** 26/10/2022**End date:** 28/10/2022**Organising entity:** The European Committee for Treatment and Research in Multiple Sclerosis

Elisabeth Solana; Jordi Casas-Roma; Eloy Martínez-Heras; Albert Solé-Ribalta; Elisabet López-Soley; Francesc Vivó; Marcos Díaz-Hurtado; Salut Alba-Arbalat; Maria Sepulveda; Yolanda Blanco; Albert Saiz; Javier Borge-Holthoefer; Sara Llufríu; Ferran Prados.

- 3** **Title of the work:** Hybrid structural arrangements mediate stability and feasibility in mutualistic networks
Name of the conference: ECONET2021: V Symposium on ecological networks

Type of participation: Participatory - oral communication**Corresponding author:** Yes**City of event:** Palma de Mallorca / IFISC,**Date of event:** 10/11/2021**End date:** 12/11/2021**Organising entity:** CSIC / IFISC / UIB



Aniello Lampo; María J. Palazzi; Javier Borge-Holthoefer; Albert Solé-Ribalta.

- 4** **Title of the work:** Applying multilayer analysis into morphological, structural and functional brain networks in multiple sclerosis
Name of the conference: 37th Congress of the European Committee for Treatment and Research in Multiple Sclerosis
Type of participation: Participatory - oral communication
Corresponding author: Yes
City of event: Online,
Date of event: 13/10/2021
End date: 15/10/2021
Organising entity: The European Committee for Treatment and Research in Multiple Sclerosis
Jordi Casas-Roma; Eloy Martinez-Heras; Albert Solé-Ribalta; Elisabeth Solana; Elisabet Lopez-Soley; Salut Alba-Arbalat; Maria Sepulveda; Yolanda Blanco; Albert Saiz; Javier Borge-Holthoefer; Sara Llufrí; Ferran Prados.
- 5** **Title of the work:** Algorithms Air Quality Estimation: A Comparative Study of Stochastic and Heuristic Predictive Models
Name of the conference: Hybrid Artificial Intelligent Systems: 16th International Conference, HAIS 2021
Type of participation: Participatory - oral communication
Corresponding author: Yes
City of event: Bilbao, Spain,
Date of event: 22/09/2021
End date: 24/09/2021
Organising entity: University of Deusto
Nadia N Sánchez-Pozo; Sergi Trilles-Oliver; Albert Solé-Ribalta; Leandro L Lorente-Leyva; Dagoberto Mayorca-Torres; Diego H Peluffo-Ordóñez.
- 6** **Title of the work:** Predicting Driver Self-Reported Stress by Analyzing the Road Scene
Name of the conference: 2021 9th International Conference on Affective Computing and Intelligent Interaction (ACII)
Type of participation: Participatory - oral communication
Corresponding author: Yes
City of event: Online,
Date of event: 01/09/2021
End date: 05/09/2021
Organising entity: IEEE
Cristina Bustos; Neska Elhaoui; Albert Solé-Ribalta; Javier Borge-Holthoefer; Agata Lapedriza; Rosalind Picard.
- 7** **Title of the work:** Online division of labour: emergent structures in Open Source Software
Name of the conference: Networks'21
Type of participation: Participatory - oral communication
Corresponding author: Yes
City of event: Online,
Date of event: 05/07/2021
End date: 10/07/2021
Organising entity: IU Network Science Institute
María Palazzi; Jordi Cabot; Javier Cánovas-Izquierdo; Albert Solé-Ribalta; Javier Borge-Holthoefer.



- 8** **Title of the work:** Advances in modelling traffic in cities and applications
Name of the conference: Complex networks in the life sciences / EBSA2019 Satellite meeting
Type of participation: Participatory - invited/keynote talk
Corresponding author: Yes
City of event: Alcalá de Henares, Spain
Date of event: 25/07/2019
End date: 25/07/2019
Organising entity: Spanish National Centre for Biotechnology
Albert Solé-Ribalta.
- 9** **Title of the work:** Congestion induced by the multiplex structure of complex networks
Name of the conference: Conference on Complex Systems
Type of participation: Participatory - oral communication
Corresponding author: Yes
City of event: Cancun, Mexico
Date of event: 18/09/2017
End date: 22/09/2017
Organising entity: Complex System Society
Albert Solé-Ribalta; Sergio Gómez; Alex Arenas.
- 10** **Title of the work:** Congestion induced by the structure of multiplex networks
Name of the conference: NetSci 2017
Type of participation: Participatory - oral communication
City of event: Indianapolis, United States of America
Date of event: 19/06/2017
End date: 23/06/2017
Organising entity: Indiana University Network Science Institute
Albert Solé-Ribalta; Sergio Gómez; Alex Arenas.
- 11** **Title of the work:** Integration-segregation dynamics in the city: structural imbalances in transportation infrastructure
Name of the conference: NetSci 2017
Type of participation: Participatory - oral communication
City of event: Indianapolis, United States of America
Date of event: 19/06/2017
End date: 23/06/2017
Organising entity: Indiana University Network Science Institute
Tahar Zanouda; Albert Solé-Ribalta; Somwrita Sarkar; Sanjay Chawla; Javier Borge-Holthoefer.
- 12** **Title of the work:** Re-thinking nested and modular networks in ecological and socio-technical complex systems
Name of the conference: NetSci 2017
Type of participation: Participatory - oral communication
City of event: Indianapolis, United States of America
Date of event: 19/06/2017
End date: 23/06/2017
Organising entity: Indiana University Network Science Institute
Albert Solé-Ribalta; Manuel Mariani; Claudio Tessone; Javier Borge-Holthoefer.

- 13** **Title of the work:** NestModularity measure for the join analysis of nested and modular networks
Name of the conference: Crossroads on Complex Systems
Type of participation: 'Participatory - poster
City of event: Palma de Mallorca, Spain
Date of event: 05/06/2017
End date: 08/06/2017
Organising entity: Institute for Cross-Disciplinary Physics and Complex Systems
Albert Solé-Ribalta; Manuel Mariani; Claudio Tessone; Javier Borge-Holthoefer.
- 14** **Title of the work:** Congestion phenomena in urban transportation networks
Name of the conference: IV Jornada de Complexitat
Type of participation: Participatory - invited/keynote talk
City of event: Castelldefels, Spain
Date of event: 24/05/2017
Organising entity: Universitat Oberta de Catalunya **Type of entity:** University
City organizing entity: Complexitat.cat,
- 15** **Title of the work:** Congestion induced by the structure of multiplex networks.
Name of the conference: 2016 Conference on Complex Systems
Type of participation: Participatory - oral communication
Corresponding author: Yes
City of event: Amsterdam, Holland
Date of event: 19/10/2016
End date: 22/10/2016
Organising entity: Complex System Society
Albert Solé Ribalta; Sergio Gómez; Arenas Alex.
- 16** **Title of the work:** Congestion induced by the structure of multiplex networks.
Name of the conference: The 2nd Annual Workshop on Complex Sociotechnical Systems
City of event: Valencia, Spain
Date of event: 08/06/2016
End date: 10/06/2016
Organising entity: Comsotec
Albert Solé Ribalta; Sergio Gómez; Arenas Alex.
- 17** **Title of the work:** Microscopic Modelling of Congestion in Transportation Networks
Name of the conference: COMSOTEC'15
City of event: Santander,
Date of event: 09/09/2015
End date: 11/09/2015
Organising entity: Instituto de Física de Cantabria **Type of entity:** Public Research Body
(IFCA)
Albert Solé Ribalta; Sergio Gómez; Alexandre Arenas Moreno.
- 18** **Title of the work:** Microscopic modelling of congestion in transportation networks
Name of the conference: Granada Seminar
Type of participation: Participatory - Plenary session
City of event: Andalusia, Spain
Date of event: 15/06/2015
End date: 19/06/2015
Organising entity: Universidad de Granada **Type of entity:** University



Albert Solé-Ribalta; Sergio Gómez; Alex Arenas.

- 19** **Title of the work:** Ranking in Multilayer Networks Unveils Versatility
Name of the conference: International Conference on Computational Social Science
Type of participation: 'Participatory - poster
City of event: Helsinki, Finland
Date of event: 08/06/2015
End date: 11/06/2015
Organising entity: Aalto University: School of Science
 Manlio De Domenico; Albert Solé-Ribalta; Elisa Omodei; Sergio Gómez; Alex Arenas.
- 20** **Title of the work:** Congestion in transportation networks at different scales
Name of the conference: NetSci Satellite ISODS II
Type of participation: Participatory - invited/keynote talk
City of event: Zaragoza, Aragon, Spain
Date of event: 01/06/2015
Organising entity: Instituto Universitario de Investigación de Biocomputación y Física de Sistemas Complejos
Type of entity: University Research Institute
- 21** **Title of the work:** Optimal multiplex topologies for search and congestion
Name of the conference: Netsci 2015
Type of participation: 'Participatory - poster
City of event: Zaragoza, Aragon, Spain
Date of event: 01/06/2015
End date: 05/06/2015
Organising entity: Instituto Universitario de Investigación de Biocomputación y Física de Sistemas Complejos
Type of entity: University Research Institute
 Albert Solé-Ribalta; Sergio Gómez; Alex Arenas.
- 22** **Title of the work:** Navigability of Interconnected Networks under Random Failures
Name of the conference: European Conference of Complex Systems 2014
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Lucca, Italy
Date of event: 22/09/2014
End date: 26/09/2014
Organising entity: Complex System Society
 Albert Solé-Ribalta; Manlio De Domenico; Sergio Gómez; Alex Arenas.
- 23** **Title of the work:** Optimal multiplex topologies for search and congestion
Name of the conference: European Conference on Complex Systems 14
Type of event: Conference
Type of participation: Participatory - oral communication
Date of event: 22/09/2014
End date: 26/09/2014
Organising entity: Complex System Society
 Albert Solé-Ribalta; Pau Erola; Sergio Gómez; Alex Arenas. pp. 149 - 155. 2014. Available on-line at: <http://doi.acm.org/10.1145/2615569.2615687>.



- 24** **Title of the work:** Centrality rankings in multiplex networks
Name of the conference: Web Science Conference 2014
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Bloomington, United States of America
Date of event: 23/06/2014
End date: 26/06/2014
Organising entity: Association for Computing Machinery
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
 Albert Solé-Ribalta; Manlio De Domenico; Sergio Gómez; Alex Arenas. "Web Science Conference, WebSci '14, Bloomington, IN, USA, June 23-26, 2014". En: Centrality rankings in multiplex networks. pp. 149 - 155. 23/06/2014. Available on-line at: <<http://doi.acm.org/10.1145/2615569.2615687>>. ISBN 978-1-4503-2622-3
- 25** **Title of the work:** Versatile nodes in complex interconnected networks
Name of the conference: NetSci 2014
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Berkeley, United States of America
Date of event: 02/06/2014
End date: 06/06/2014
Organising entity: University of California at Davis **Type of entity:** University
 Albert Sole-Ribalta; Manlio De Domenico; Elisa Omodei; Sergio Gomez; Alex Arenas.
- 26** **Title of the work:** On the Diffusion Dynamics over Generic Multiplex Networks
Name of the conference: European Conference on Complex Systems 2013
Type of event: Conference
Type of participation: Participatory - oral communication
Date of event: 16/09/2013
End date: 20/09/2013
Organising entity: Complex System Society
 Albert Sole-Ribalta; Manlio De Domenico; Sergio Gómez; Alex Arenas.
- 27** **Title of the work:** Super-Diusive Random Walkers in Multiplex Networks
Name of the conference: European Conference on Complex Systems 13
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Barcelona, Catalonia, Spain
Date of event: 16/09/2013
End date: 20/09/2013
Organising entity: Complex System Society
 Manlio De Domenico; Albert Sole-Ribalta; Sergio Gomez; Alex Arenas.
- 28** **Title of the work:** Computing the graph edit distance using dominant sets
Name of the conference: 21st International Conference on Pattern Recognition
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Tsukuba, Japan
Date of event: 11/11/2012



End date: 15/11/2012

Organising entity: International Association for Pattern Recognition

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Nicola Rebagliati; Albert Solé-Ribalta; Marcello Pelillo; Francesc Serratosa. "Proceedings of the 21st International Conference on Pattern Recognition, {ICPR} 2012, Tsukuba, Japan, November 11-15, 2012". pp. 1080 - 1083. 11/11/2012. Available on-line at: <http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=6460323>. ISBN 978-1-4673-2216-4

29 Title of the work: Interactive graph matching by means of imposing the pairwise costs

Name of the conference: 21st International Conference on Pattern Recognition

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Tsukuba, Japan

Date of event: 11/11/2012

End date: 15/11/2012

Organising entity: International Association for Pattern Recognition

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Francesc Serratosa; Xavier Cortés; Albert Solé-Ribalta. "Proceedings of the 21st International Conference on Pattern Recognition, {ICPR} 2012, Tsukuba, Japan, November 11-15, 2012". pp. 1298 - 1301. 11/11/2012. Available on-line at: <http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=6460377>. ISBN 978-1-4673-2216-4

30 Title of the work: A Comparison between Structural and Embedding Methods for Graph Classification

Name of the conference: Structural, Syntactic, and Statistical Pattern Recognition

Type of event: Conference

City of event: Hiroshima, Japan

Date of event: 07/11/2012

End date: 09/11/2012

Organising entity: International Association of Pattern Recognition

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Albert Solé-Ribalta; Xavier Cortés; Francesc Serratosa. "Structural, Syntactic, and Statistical Pattern Recognition - Joint {IAPR} International Workshop, SSPR{&}SPR 2012, Hiroshima, Japan, November 7-9, 2012. Proceedings". 7626, pp. 234 - 242. 07/11/2012. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-34166-3_26>. ISBN 978-3-642-34165-6

31 Title of the work: Active Graph Matching Based on Pairwise Probabilities between Nodes

Name of the conference: Structural, Syntactic, and Statistical Pattern Recognition

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Hiroshima, Japan

Date of event: 07/11/2012

End date: 09/11/2012

Organising entity: International Association for Pattern Recognition

Publication in conference proceedings: Yes

Type of contribution: Scientific paper

Xavier Cortés; Francesc Serratosa; Albert Solé-Ribalta. "Structural, Syntactic, and Statistical Pattern Recognition - Joint {IAPR} International Workshop, SSPR{&}SPR 2012, Hiroshima, Japan, November 7-9, 2012. Proceedings". 7626, pp. 98 - 106. 2012. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-34166-3_11>. ISBN 978-3-642-34165-6

32 Title of the work: Graph Database Retrieval Based on Metric-Trees

Name of the conference: Structural, Syntactic, and Statistical Pattern Recognition

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Hiroshima, Japan

Date of event: 07/11/2012

End date: 09/11/2012

Organising entity: International Association for Pattern Recognition

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Francesc Serratosa; Xavier Cortés; Albert Solé-Ribalta. "Structural, Syntactic, and Statistical Pattern Recognition - Joint {IAPR} International Workshop, SSPR{&}SPR 2012, Hiroshima, Japan, November 7-9, 2012. Proceedings". pp. 437 - 447. 07/11/2012. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-34166-3_48>. ISBN 978-3-642-34165-6

33 Title of the work: On the Relation between the Common Labelling and the Median Graph

Name of the conference: Structural, Syntactic, and Statistical Pattern Recognition

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Hiroshima, Japan

Date of event: 07/11/2012

End date: 09/11/2012

Organising entity: International Association for Pattern Recognition

Publication in conference proceedings: Yes

Type of contribution: Scientific paper

Nicola Rebagliati; Albert Solé-Ribalta; Marcello Pelillo; Francesc Serratosa. "Structural, Syntactic, and Statistical Pattern Recognition - Joint {IAPR} International Workshop, SSPR{&}SPR 2012, Hiroshima, Japan, November 7-9, 2012. Proceedings". pp. 107 - 115. 2012. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-34166-3_12>. ISBN 978-3-642-34165-6

34 Title of the work: Group-wise Sparse Correspondences between Images based on a Common Labelling Approach

Name of the conference: International Conference on Computer Vision Theory and Applications

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Roma, Italy

Date of event: 24/02/2012

End date: 26/02/2012

Organising entity: Institute for Systems and Technologies of Information, Control and Communication

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Albert Solé-Ribalta; Gerard Sanromà; Francesc Serratosa; René Alquézar. "{VISAPP} 2012 - Proceedings of the International Conference on Computer Vision Theory and Applications, Volume 1, Rome, Italy, 24-26 February, 2012.". pp. 269 - 278. 24/02/2012. ISBN 978-989-8565-03-7



- 35** **Title of the work:** K-nn Queries in Graph Databases Using M-Trees
Name of the conference: 14th International Conference Computer Analysis of Images and Patterns
Type of event: Conference
City of event: Sevilla, Spain
Date of event: 29/08/2011
End date: 31/08/2011
Organising entity: International Association for Pattern Recognition
Type of contribution: Scientific paper
Francesc Serratos; Albert Solé-Ribalta; Xavier Cortés. "Computer Analysis of Images and Patterns - 14th International Conference, {CAIP} 2011, Seville, Spain, August 29-31, 2011, Proceedings, Part {I}". 6854, pp. 202 - 210. 29/08/2011. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-23672-3_25>. ISBN 978-3-642-23671-6
- 36** **Title of the work:** A Probabilistic Framework to Obtain a Common Labelling between Attributed Graphs
Name of the conference: 5th Iberian Conference of Pattern Recognition and Image Analysis
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Las Palmas de Gran Canaria, Spain
Date of event: 08/06/2011
End date: 10/06/2011
Organising entity: International Association for Pattern Recognition
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
Albert Solé-Ribalta; Francesc Serratos. "Pattern Recognition and Image Analysis - 5th Iberian Conference, IbPRIA 2011, Las Palmas de Gran Canaria, Spain, June 8-10, 2011. Proceedings". 6669, pp. 516 - 523. 08/06/2011. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-21257-4_64>. ISBN 978-3-642-21256-7
- 37** **Title of the work:** Graph Matching on a Low-Cost and Parallel Architecture
Name of the conference: 5th Iberian Conference Pattern Recognition and Image Analysis
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Las Palmas de Gran Canaria, Spain
Date of event: 08/06/2011
End date: 10/06/2011
Organising entity: International Association for Pattern Recognition
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
David Ródenas; Francesc Serratos; Albert Solé-Ribalta. "Pattern Recognition and Image Analysis - 5th Iberian Conference, IbPRIA 2011, Las Palmas de Gran Canaria, Spain, June 8-10, 2011. Proceedings". 6669, pp. 508 - 515. 08/06/2011. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-21257-4_63>. ISBN 978-3-642-21256-7
- 38** **Title of the work:** Automatic Learning of Edit Costs Based on Interactive and Adaptive Graph Recognition
Name of the conference: 8th Graph-Based Representations in Pattern Recognition
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Munster, Germany
Date of event: 18/04/2011
End date: 20/04/2011



Organising entity: International Association for Pattern Recognition

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Francesc Serratosa; Albert Solé-Ribalta; Xavier Cortés. "Graph-Based Representations in Pattern Recognition - 8th {IAPR-TC-15} International Workshop, GbRPR 2011, Münster, Germany, May 18-20, 2011. Proceedings". 6658, pp. 152 - 163. 18/04/2011. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-20844-7_16>. ISBN 978-3-642-20843-0

39 Title of the work: Exploration of the Labelling Space Given Graph Edit Distance Costs

Name of the conference: 8th Graph-Based Representations in Pattern Recognition

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Munster, Germany

Date of event: 18/04/2011

End date: 20/04/2011

Organising entity: International Association for Pattern Recognition

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Albert Solé-Ribalta; Francesc Serratosa. "Graph-Based Representations in Pattern Recognition - 8th {IAPR-TC-15} International Workshop, GbRPR 2011, Münster, Germany, May 18-20, 2011. Proceedings". 6658, pp. 164 - 174. 18/04/2011. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-20844-7_17>. ISBN 978-3-642-20843-0

40 Title of the work: Parallel Graduated Assignment Algorithm for Multiple Graph Matching Based on a Common Labelling

Name of the conference: 8th Graph-Based Representations in Pattern Recognition

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Munster, Germany

Date of event: 18/04/2011

End date: 20/04/2011

Organising entity: International Association for Pattern Recognition

With external admission assessment committee: Yes

Type of contribution: Scientific paper

David Ródenas; Francesc Serratosa; Albert Solé-Ribalta. "Graph-Based Representations in Pattern Recognition - 8th {IAPR-TC-15} International Workshop, GbRPR 2011, Münster, Germany, May 18-20, 2011. Proceedings". 6658, pp. 132 - 141. 18/04/2011. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-20844-7_14>. ISBN 978-3-642-20843-0

41 Title of the work: Graph Indexing and Retrieval Based on Median Graphs

Name of the conference: 2nd Mexican Conference on Pattern Recognition

Type of event: Conference

Type of participation: Participatory - oral communication

City of event: Puebla, Mexico

Date of event: 27/09/2010

End date: 29/09/2010

Organising entity: International Association for Pattern Recognition

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Francesc Serratosa; Albert Solé-Ribalta; Enric Vidiella. "Advances in Pattern Recognition - Second Mexican Conference on Pattern Recognition, {MCPR} 2010, Puebla, Mexico, September 27-29, 2010. Proceedings". 6256, pp. 311 - 321. 27/09/2010. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-15992-3_33>. ISBN 978-3-642-15991-6

- 42 Title of the work:** Graduated Assignment Algorithm for Finding the Common Labelling of a Set of Graphs
Name of the conference: 13th Structural, Syntactic, and Statistical Pattern Recognition
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Cesme, Turkey
Date of event: 18/08/2010
End date: 20/08/2010
Organising entity: International Association for Pattern Recognition
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
Albert Solé-Ribalta; Francesc Serratosa. "Structural, Syntactic, and Statistical Pattern Recognition, Joint {IAPR} International Workshop, SSPR{&}SPR 2010, Cesme, Izmir, Turkey, August 18-20, 2010. Proceedings". 6218, pp. 180 - 190. 18/08/2010. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-14980-1_17>. ISBN 978-3-642-14979-5
- 43 Title of the work:** On the Computation of the Common Labelling of a Set of Attributed Graphs
Name of the conference: 14th Iberoamerican Conference on Pattern Recognition
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Guadalajara, Mexico
Date of event: 15/11/2009
End date: 18/11/2009
Organising entity: International Association for Pattern Recognition
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Albert Solé-Ribalta; Francesc Serratosa. "Progress in Pattern Recognition, Image Analysis, Computer Vision, and Applications, 14th Iberoamerican Conference on Pattern Recognition, {CIARP} 2009, Guadalajara, Jalisco, Mexico, November 15-18, 2009. Proceedings". 5856, pp. 137 - 144. 15/11/2009. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-10268-4_16>. ISBN 978-3-642-10267-7
- 44 Title of the work:** A Structural and Semantic Probabilistic Model for Matching and Representing a Set of Graphs
Name of the conference: 7th Graph-Based Representations in Pattern Recognition
Type of event: Conference
Type of participation: Participatory - oral communication
City of event: Venecia, Italy
Date of event: 26/04/2009
End date: 28/04/2009
Organising entity: International Association for Pattern Recognition.
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
Albert Solé-Ribalta; Francesc Serratosa. "Graph-Based Representations in Pattern Recognition, 7th {IAPR-TC-15} International Workshop, GbRPR 2009, Venice, Italy, May 26-28, 2009. Proceedings". 5534, pp. 164 - 173. 26/04/2009. Available on-line at: <http://dx.doi.org/10.1007/978-3-642-02124-4_17>. ISBN 978-3-642-02123-7

Works submitted to national or international seminars, workshops and/or courses

Title of the work: Versatile nodes in multilayer networks

Name of the event: III Jornada complexitat.cat

City of event: Barcelona, Spain

Date of event: 19/06/2014

End date: 19/06/2014

Organising entity: complexitat.cat

R&D management and participation in scientific committees

Scientific, technical and/or assessment committees

- Committee title:** Avaluador Convocatòries UOC
Affiliation entity: Universitat Oberta de Catalunya **Type of entity:** University
Start date: 01/06/2020
- Committee title:** Scientific committee: CompleNet (complenet.weebly.com/),
Affiliation entity: Universitat Oberta de Catalunya **Type of entity:** University
Start date: 01/01/2019
- Committee title:** Scientific Committee: Complex Networks (complexnetworks.org)
Affiliation entity: Universitat Oberta de Catalunya **Type of entity:** University
Start date: 2019
- Committee title:** Scientific Committee: NetSciX2019
Affiliation entity: Universitat Oberta de Catalunya **Type of entity:** University
Start date: 2019

Organization of R&D activities

- Title of the activity:** Comsotec 21 Tarragona
Type of activity: Organization
City convening entity: Tarragona, Spain
Start-End date: 17/02/2022 - 18/02/2022
- Title of the activity:** Organizer CCS'21 - SATELLITE WORKSHOP COMPUTATIONAL SOCIAL SCIENCE
Type of activity: Organization
Start-End date: 25/10/2021 - 29/10/2021
- Title of the activity:** Organizer - X Jornada de la Complexitat: Interdisciplinary Research on Complexity
Start date: 03/2023
- Title of the activity:** Data Science in/for Barcelona 2.0 (<https://sites.google.com/view/ds4bcn-2023>)
Type of activity: Workshop
Convening entity: FUNDACIO PER A LA UNIVERSITAT OBERTA DE CATALUNYA



City convening entity: Barcelona

Start date: 13/12/2022

5 Title of the activity: Data Science in/for Barcelona (<https://sites.google.com/view/ds4bcn>)

Type of activity: Workshop

Convening entity: FUNDACIO PER A LA UNIVERSITAT OBERTA DE CATALUNYA

City convening entity: Barcelona

Start date: 30/11/2022

6 Title of the activity: Organizer CCS'20 - SATELLITE WORKSHOP COMPUTATIONAL SOCIAL SCIENCE

Start date: 09/12/2020

7 Title of the activity: Organizer - VI Jornada de la Complexitat: Interdisciplinary Research on Complexity

Start date: 24/05/2017

8 Title of the activity: Data Science in/for Barcelona

Type of activity: Workshop

City of event: Barcelona,

Nº assistants: 69

Other achievements

Stays in public or private R&D centres

1 Entity: Universität Zürich

Faculty, institute or centre: Network Science Group (IBW)

Start-End date: 01/09/2019 - 31/08/2021

Goals of the stay: Guest

Provable tasks: Visiting Profesor - Coauthoring publicaions

2 Entity: Università Ca' Foscari di Venezia

Type of entity: University

Faculty, institute or centre: Scienze Ambientali, Informatica e Statistica

City of entity: Venecia, Veneto, Italy

Start-End date: 01/10/2011 - 18/06/2012

Duration: 8 months

Goals of the stay: Doctorate

Provable tasks: Research

Obtained grants and scholarships

Name of the grant: Beca Predoctoral Universitat Rovira i Virgili

Aims: Pre-doctoral

Awarding entity: Universitat Rovira i Virgili

Type of entity: University

Conferral date: 01/09/2008

Duration: 4 years

End date: 31/08/2012



Scientific societies and professional associations

- 1** **Name of the society:** Col·legi Oficial Enginyeria en Informàtica de Catalunya
Start-End date: 2012 - 2019
- 2** **Name of the society:** COMSOTEC (www.comsotec.org)
Start date: 2015
- 3** **Name of the society:** Complex Systems Society
Start date: 2015
- 4** **Name of the society:** Complexitat.cat (complexitat.cat)
Start date: 2015

Prizes, mentions and distinctions

- 1** **Description:** 2024 Web Science Trust Test of Time Award
Awarding entity: Web Science Trust (WST)
City awarding entity: Stuttgart, Germany
Conferral date: 22/04/2024
- 2** **Description:** Premi Cross, Inter, and trans-disciplinary Collaborations de la UOC
Awarding entity: Universitat Oberta de Catalunya **Type of entity:** University
Conferral date: 23/02/2024
Recognition linked: Applying multilayer analysis to morphological, structural, and functional brain networks to identify relevant dysfunction patterns
- 3** **Description:** Premi Cross, Inter, and trans-disciplinary Collaborations de la UOC
Awarding entity: Universitat Oberta de Catalunya **Type of entity:** University
Conferral date: 08/03/2022
Recognition linked: Paper - Measuring and mitigating behavioural segregation using Call Detail Records

Summary of other achievements

- 1** **Description of the achievement:** Avaluació Activitat Acadèmica- Tram docent (Docentia)
Accrediting entity: FUNDACIO PER A LA UNIVERSITAT OBERTA DE CATALUNYA
Conferral date: 22/12/2022
- 2** **Description of the achievement:** Activitat investigadora (sexennis) per conveni (2014-2019)
Accrediting entity: Agència Per A La Qualitat Del Sistema Universitari De Catalunya **Type of entity:** State agency
City accrediting entity: Barcelona, Catalonia, Spain
Conferral date: 10/12/2021



3 Description of the achievement: Activitat investigadora (sexennis) per conveni (2008-2013)
Accrediting entity: Agencia Per A La Qualitat Del Sistema Universitari De Catalunya **Type of entity:** State agency
City accrediting entity: Barcelona, Catalonia, Spain
Conferral date: 20/12/2019

4 Description of the achievement: Acreditacion Professorat Agregat
Accrediting entity: Agencia Per A La Qualitat Del Sistema Universitari De Catalunya **Type of entity:** State agency
City accrediting entity: Barcelona, Catalonia, Spain
Conferral date: 13/10/2016

5 Description of the achievement: Acreditacion Professorat Lector
Accrediting entity: Agencia Per A La Qualitat Del Sistema Universitari De Catalunya **Type of entity:** State agency
City accrediting entity: Barcelona, Catalonia, Spain
Conferral date: 21/02/2013

6 Description of the achievement: Reviewer Networks and Spatial Economics

7 Description of the achievement: Reviewer PLoS ONE

8 Description of the achievement: Reviewer PRE

9 Description of the achievement: Reviewer Pattern Recognition

10 Description of the achievement: Reviewer Physica A

11 Description of the achievement: Reviewer Physica D: Nonlinear Phenomena

12 Description of the achievement: Reviewer Physica D: Nonlinear Phenomena

13 Description of the achievement: Reviewer Royal Society Open Science

14 Description of the achievement: Reviewer Scientific Reports - Nature



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CURRÍCULUM VÍTAE NORMALIZADO

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Other merits of research activity