# Sandra Servia-Rodríguez

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## RESEARCH EXPERIENCE

Aug 2017 – ongoing	<b>Research Associate</b> in the Systems Research Group of the <b>University of Cambridge (UK)</b> , under the supervision of Prof Cecilia Mascolo.
Oct 2016 – Aug 2017	<b>Research Associate</b> in the School of Electronic Engineering and Computer Science (EECS) of the <b>Queen Mary University of London</b> ( <b>UK</b> ), under the supervision of Dr Hamed Haddadi.
Mar 2016 – Aug 2016	Research Engineer in the Manageability and Security Research Group, HP Labs (Bristol, UK).
Nov 2015 – Feb 2016	Research Associate in the Systems Research Group of the University of Cambridge (UK), under the supervision of Prof Cecilia Mascolo.
Sep 2011 – Aug 2015	<b>Graduate Research Assistant</b> at the Department of Telematics Engineering of the <b>University of Vigo (Spain)</b> , under the supervision of Dr Ana Fernández-Vilas and Dr Rebeca P. Díaz-Redondo.
Nov 2010 – Jul 2011	<b>Research Assistant</b> ( <i>Ministry of Education</i> Fellowship holder) at the Department of Telematics Engineering of the <b>University of Vigo</b> ( <b>Spain</b> ), under the supervision of Dr Ana Fernández-Vilas and Dr Rebeca P. Díaz-Redondo.
Jun 2010 – Nov 2010	<b>Research Assistant</b> ( <i>FEUGA</i> Fellowship holder) at the Department of Signal Theory and Communications of the <b>University of Vigo</b> ( <b>Spain</b> ), under the supervision of Prof Marcos Arias.

## **INTERNSHIPS & RESEARCH VISITS**

Sep 2016 – Oct 2016	<b>Visiting Research Associate</b> in the Systems Research Group of the <b>University of Cambridge</b> ( <b>UK</b> ), under the supervision of Prof Cecilia Mascolo.
Apr 2014 – Aug 2014	<b>Research Intern</b> in the Social Computing Group, <b>HP Labs (Palo Alto, California, USA),</b> under the supervision of Dr Bernardo A. Huberman.
May 2013 – Sep 2013	<b>Visiting Student Researcher</b> in the Systems Research Group of the <b>University of Cambridge</b> ( <b>UK</b> ), under the supervision of Prof Cecilia Mascolo.

## **EDUCATION**

Oct 2012 – July 2015	<b>PhD</b> in <b>Telematics Engineering.</b> University of Vigo (Summa Cum Laude) Thesis title: "Social Data Mining Strategies for User modelling with Personalisation Purposes" Funded by the Spanish Ministry of Science and Innovation
Sept 2011 – July 2012	<b>MSc</b> in <b>Telematics Engineering.</b> University of Vigo (top 5% of class) Thesis title: "Inferring Ties for Social-aware Ambient Intelligence: the Facebook Case"
Sept 2009 – July 2011	<b>Telecommunication Engineering Degree</b> (5-years degree), specialisation in Telematics. University of Vigo (top 5% of class) Thesis title: <i>Application to recommend YouTube videos to Facebook users</i> "
Sept 2006 – Sept 2009	<b>BSc</b> in <b>Telecommunication Engineering</b> (3-years degree), specialisation in Telecommunication Systems. University of Vigo (1 <sup>st</sup> of class)

# **RESEARCH INTERESTS**

Mobile sensing, mobile health, privacy-preserving analytics, data mining, ubiquitous computing

# **PUBLICATIONS**

Sequence Multi-task Learning to Forecast Mental Wellbeing from Sparse Self-reported Data. Spathis, D., Servia-Rodríguez, S., Farrahi, K., Mascolo, C., Rentfrow, P.J. To appear in the 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2019).

- Passive mobile sensing and psychological traits for large scale mood prediction. Spathis, D., Servia-Rodríguez, S., Farrahi, K., Mascolo, C., Rentfrow, P.J. In the 13th EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth 2019).
- Privacy-Preserving Personal Model Training. **Servia-Rodríguez, S.**, Wang L., Zhao, J.R., Mortier, R., Haddadi, H. (2018) In the 3rd ACM/IEEE International Conference on Internet-of-Things Design and Implementation (IoTDI 2018). Orlando, Florida (USA)
- Mobile sensing at the service of mental wellbeing: a large-scale longitudinal study. **Servia-Rodríguez, S.,** Rachuri, K., Mascolo, C., Rentfrow, P.J., Lathia, N. & Sandstrom, G. (2017) In *the 26th World Wide Web Conference (WWW2017)*. Computational Health Track. Perth (Australia)
- Identifying urban crowds using geo-located Social media data: a Twitter experiment in New York City. Ben Kalifa, M., Díaz Redondo, R. P., Fernández Vilas, A., Servia-Rodríguez, S. In *Journal of Intelligent Information Systems*, 48(2), 287-308. doi:10.1007/s10844-016-0411-x. (2017). Journal indexed in 'Journal Citation Reports' (Thomson Reuters), Impact Factor (2015): 1,000 (Position 87/144 in 'Computer Science Information Systems', Q3).
- The evolution of your success lies at the centre of your co-authorship network. **Servia-Rodríguez, S.**, Noulas, A., Mascolo, C., Fernández-Vilas, A. & Díaz-Redondo, R.P. *PLoS ONE*, 10:e0114302, 03 2015. Journal indexed in 'Journal Citation Reports' (Thomson Reuters), Impact Factor (2015): 3,057 (Position 11/63 in 'Multidisciplinary Sciences, Q1).
- Deciding what to display: maximizing the information value of social media. Servia-Rodríguez, S., Huberman, B. A. & Asur S. (2015). In Workshop on Modeling and Mining Temporal Interactions (M2TI) at ICWSM'15. Oxford (UK)
- Are tweets biased by audience? An analysis from the view of topic diversity. Servia-Rodríguez, S., Díaz-Redondo, R.P. & Fernández-Vilas, A. (2015). In *International Conference on Social Computing, Behavioral-Cultural Modeling*, & Prediction (SBP15). Washington D.C. (USA)
- A tie strength based model to socially-enhance applications and its enabling implementation: mySocialSphere. **Servia-Rodríguez, S.,** Díaz-Redondo, R.P., Fernández-Vilas, A., Blanco-Fernández, Y. & Pazos-Arias, J.J. (2014). *Expert Systems With Applications*, 41(5), 2582-2594. Journal indexed in 'Journal Citation Reports' (Thomson Reuters), Impact Factor (2014): 2,240 (Position 12/81 in 'Operations research & Management Science, Q1).
- IPTV Parental control: a collaborative model for the Social Web. Fernández-Vilas, A., Díaz-Redondo, R. P., Servia-Rodríguez, S. (2014). *Information Systems Frontiers*, 1-16. Journal indexed in 'Journal Citation Reports' (Thomson Reuters), Impact Factor (2014): 1,077 (Position 40/102 in 'Computer Science Theory & methods', Q2).
- The evolution of your success lies in the centre of your co-authorship network. **Servia-Rodríguez, S.**, Noulas, A., Mascolo, C., Fernández-Vilas, A. & Díaz-Redondo, R.P. (2014). In *Quantifying Success* (2.0) co-located with ECCS'14. Lucca (Italy). (Contributed talk)
- Inferring Contexts from Facebook Interactions: a Social Publicity Scenario. Servia-Rodríguez, S., Fernández-Vilas, A., Díaz-Redondo, R. P. & Pazos-Arias, J. J. (2013). *IEEE Transactions on Multimedia*, 15(6), 1296-1303. Journal indexed in 'Journal Citation Reports' (Thomson Reuters), Impact Factor (2013): 1,776 (Position 15/105 in 'Computer Science Software Engineering, Q1).
- Comparing tag clustering algorithms for mining Twitter users' interests. Servia-Rodríguez, S., Fernández-Vilas, A., Díaz-Redondo, R. P. & Pazos-Arias, J. J. (2013). In ASE/IEEE International Conference on Social Computing (socialCom). Washington D.C. (USA).
- Mining Facebook Activity to Discover Social Ties: Towards a Social-Sensitive Ecosystem. Servia-Rodríguez, S., Fernández-Vilas, A., Díaz-Redondo, R. P. & Pazos-Arias, J. J. (2013). Cloud Computing and Services Science. Communications in Computer and Information Science, 367, 71-85, Springer.
- Inferring Ties for Social-aware Ambient Intelligence: the Facebook Case. Servia-Rodríguez, S., Fernández-Vilas, A., Díaz-Redondo, R. P. & Pazos-Arias, J. J. (2012). In 3<sup>st</sup> International Symposium on Ambient Intelligence (ISAmI). Salamanca (Spain).
- Semantics-Driven Recommendation of Coupons Through Digital TV: Exploiting Synergies with Social Networks. Martín-Vicente, M. I., Gil-Solla, A., Ramos-Cabrer, M., Blanco-Fernández, Y. & Servia-Rodríguez, S. (2012). In *International Conference on Consumer Electronics (ICCE)*. Las Vegas (USA): IEEE.
- A Virtualization Layer for Mobile Consumer Devices to Support Demanding Communication Services in Vehicular Ad-hoc Networks. Bravo-Torres, J. F., López-Nores, M., Blanco-Fernández, Y., Servia-Rodríguez, S. & García-Duque, J. (2012). In *International Conference on Consumer Electronics (ICCE)* ---Special Merit Award for Outstanding Paper. Las Vegas, USA: IEEE.

- Using Facebook activity to infer social ties. Servia-Rodríguez, S., Díaz-Redondo, R. P., Fernández-Vilas, A. & Pazos-Arias, J. J. (2012). In 2nd International Conference on Cloud Computing and Services Science (CLOSER). Porto (Portugal).
- A Social P2P Approach for Personal Knowledge Management in the Cloud. Díaz-Redondo, R. P., Fernández-Vilas, A., Servia-Rodríguez, S. & Pazos-Arias, J. J. (2012). In 1st International Workshop on Socially Intelligent Computing (SINCOM 2012). Rome (Italy).

#### PARTICIPATION IN RESEARCH PROJECTS

- Centre for Mobile, Wearable Systems and Augmented Intelligence (2018-2013)
  - Financial baker: Nokia Bell-Labs
  - Project manager: Prof Cecilia Mascolo and Dr Alastair Beresford (University of Cambridge)
  - Partners: University of Cambridge, Nokia Bell-Labs
- Mobile Sensing based App for home-based Testing of memory in People at risk of Alzheimer's disease (MAP-PAD) (2018)
  - Financial baker: Medical Research Council (Confidence in Concept call).
  - Project manager: Prof Cecilia Mascolo and Dr Dennis Chan (University of Cambridge)
  - Partners: University of Cambridge
- Early Alzheimer's Disease Diagnostics Through Outdoor Navigation Sensing (2017)
  - Financial backer: The Alan Turing Institute (seed funding)
  - Project manager: Prof Cecilia Mascolo (University of Cambridge)
  - Partners: University of Cambridge

#### Databox: Privacy-Aware Infrastructure for Managing Personal Data (2016-2019)

- Financial backer: Engineering and Physical Sciences Research Council (EPSRC)
- Project manager: Dr Hamed Haddadi (Queen Mary University of London)
- Partners: University of Cambridge, Queen Mary University of London and University of Nottingham

#### ■ Emotion Sense Project. (2015-2016)

- Financial backer: Engineering and Physical Sciences Research Council (EPSRC) through the EPSRC Projects CambridgeSens and UBHAVE
- Project manager (*UBHAVE*): Prof Cecilia Mascolo (University of Cambridge)
- Partners (*UBHAVE*): University of Cambridge, University of Southampton, UCL, University of St. Andrews, University of Oxford

# ■ INRISCO and EMRISCO: Incident monitoring and EMergence Response In Smart Communities. (2014-2015)

- Financial backer: Spanish Ministry of Economy and Competitiveness
- Project manager: Dr Rebeca P. Díaz Redondo (UVigo)
- Partners: UPC, UC3M, UVigo and Gradiant

## CLOUDIA: Social ecosystem for the ubiquitous and personalized provision of services in the Cloud. (2010-2013)

- Financial backer: Spanish Ministry of Science and Innovation
- Project manager: Dr Ana Fernández Vilas (UVigo)

# PARTICIPATION IN EACEA AND INDUSTRIAL PROJECTS

- **GreenIT** for the benefit of civil society. (2012-2015) (EACEA Project)
  - Financial backer: Education, Audiovisual and Culture Executive Agency.
  - Project coordinator: Dr Rebeca P. Díaz Redondo (UVigo)
- SITAR: Sistema integral de atención de reclamaciones. (2014) (Industrial Project)
  - Financial backer: Unión Fenosa Distribución
  - Project coordinator: Dr Rebeca P. Díaz Redondo (UVigo)

#### TEACHING AND MENTORING

- Associate Lecturer at the Dept. of Computer Science and Technology (University of Cambridge). Taught
  MPhil course "Advanced topics in mobile and sensor systems and data modelling" (academic year
  2018-2019)
- **Supervision** of **Part II individual project** (Computer Science Tripos) on "Comparing Machine Learning Techniques for Mobility Graph Classification" (2017-2018).

- **Co-supervision** of **MPhil in ACS research project** on "Exploring Machine Learning Techniques to Assess the Impact of Sleep Quality in Mental Well-being at Scale" (2017-2018).
- Supervision of Mobile and Sensor Systems course (Computer Science Tripos, Lent 2018 and Lent 2019).
- Undergraduate courses taught at the degree on Engineering of Telecommunication Technologies (University of Vigo):
  - Computer Architecture (academic year 2013-2014).
  - **Programming II** (academic years 2013-2014 and 2014-2015).
  - Supervision of 2 Bachelor's and 2 Master's theses. University of Vigo. (2013-2015).

#### HONORS AND AWARDS

- Computer Lab Better Future Award Publication of the Year for Servia-Rodríguez et al. WWW 2017.
- **FPI Research Fellowship** granted by the *Spanish Ministry of Science and Innovation*, at the Department of Telematics Engineering in the University of Vigo and associated to the project *CLOUDIA*. 2011 2015.
- **Fellowship to Collaborate** at the Department of Telematics Engineering in the University of Vigo granted by the *Spanish Ministry of Education*. November 2010 July 2011.
- **Special graduation award** granted by the *University of Vigo* for obtaining the best student marks in BSc Telematics Engineering (3-years degree). 2009.

#### **SERVICE**

- Program Committee Member for The Web Conference, Health on the Web track (WWW 2019)
- Program Committee Member for <u>Pervasive Health 2019</u>
- Technical Program Committee member for <u>ACM Eurosys'19</u> Workshop on <u>Edge Systems</u>, <u>Analytics and Networking'' (Edgesys19)</u>
- Co-organiser of the <u>3rd International Workshop on "Mental Health and Well-being: Sensing and Intervention"</u>, collocated with <u>Ubicomp 2018</u>
- Organised N^2 Women meeting at <u>Ubicomp 2018</u>.
- Local Committee member for <u>The 7<sup>a</sup> International Conference on Complex Networks and Their Applications</u> (Complex Networks 2018)
- Co-organiser of Workshop on "<u>Innovations in data capture and analytics for the diagnosis of early Alzheimer's disease</u>" at The Alan Turing Institute (April 2018)
- Technical Program Committee member for <u>IEEE INFOCOM'18</u> Workshop on <u>"Hot Topics in Pervasive Mobile and Online Social Networking" (HotPOST'18)</u>
- Reviewer for Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)
- Reviewer for <u>Computer</u>
- Reviewer for <u>IEEE Pervasive Computing Magazine</u>
- Reviewer for <u>Journal of Biomedical and Health Informatics (IEEE JBHI)</u>
- Reviewer for <u>PLOS ONE</u>
- Reviewer for <u>Royal Society Open Science</u>

## **OTHER ROLES**

- Jesus College Post-Doctoral Affiliate (Oct 2018 ongoing)
- Member of the committee for the evaluation of Degrees, Masters and Doctoral programmes in the Universities of Galicia (USC, UDC and UVIGO) and in the Néstor Cáceres Velásquez Andina University (UANCV) and University of San Martín de Porres in Peru. Agency for Quality Assurance in the Galician Universities (ACSUG). 2011 2016.
- Coordinator of the research seminar organised as part of the PhD programme in Information and Communication Technology (ICT). University of Vigo. Oct 2014- July 2015.
- Workshops and ICT-related activities monitor in the Summer Scientific Camps, addressed to secondary school pupils and organized by the Spanish Ministry of Education. Vigo, July 2011.