

Jesus A. Rodriguez Perez

Professional Experience

2021–present **Data Science Lecturer**, School of Computing Science, University of Glasgow, UK.
Teaching data science courses and supervising of projects involving NLP, Machine Learning, Information Retrieval and related technologies.

- **Text As Data** Course. This course delivers an introduction to leveraging text as a source of data. Students are taught about language models, text classification (machine learning), NLP, embeddings, and modern contextual language models based on transformer architectures.
- **Introduction to Data Science and Systems** Course. My section deals with database systems. Particularly, how is data physically organised, how data structures facilitate querying, as well as techniques to estimate query execution costs which enable query optimisation.

2017–2020 **Research Associate**, Institute of Health & Wellbeing, University of Glasgow, UK.
Assisting on research about diabetes and cardiovascular issues, eligibility criteria to medical trials and streamlining the research processes within the institute.

- Developed **TableTidier**, tool that utilises informed classifiers for the semi-automated extraction of data from PDF tables preserving relationships with headings. (Demo: <https://vimeo.com/365161796>)
- Created **R for Researchers** an online course for the University of Glasgow, which aims to introduce R tools to streamline research activities within the Health and Wellbeing Institute. Focused on version control and publication libraries. (Course link: <https://youtube.com/watch?v=f5W3cNbFT2w>)

2015–2017 **Data Specialist**, CREATE - School of Law, University of Glasgow, UK.
Provide data-driven solutions to copyright research problems, maintain IT infrastructures and design & develop software. Involved in numerous projects:

- **Online Media Behaviour Analytics**. A web tool to allow the interrogation and data extraction from Ofcom/IPO survey datasets on infringement and media consumption behaviour in the UK. (<http://www.create.ac.uk/omeba>)
- **Intellectual Property - Oral History Project**. A web registry of IP related material. Developed the site from the ground up using NodeJS, React and other state-of-the-art web technologies. (<http://iporalhistory.co.uk>)
- **Digitising the Edwin Morgan Scrapbooks**. Portal and annotation tool development. (www.digitisingmorgan.org)
- **Litigation Explorer**. Web tool to interrogate a dataset of IP litigation cases from the small claims court in London. (<http://copyrightcentral.arts.gla.ac.uk/litexp>)
- **Creative Output in a Market Context**. Real-time and multi-user evaluation platform to study the effects of creativity in a economics context.
- **EU Hackathon**. Co-organiser of the challenges for the copyright-related 2016 EU Hackathon. (<http://2016.euhackathon.eu/>)

- 2015 **Search Engine Specialist**, Scoop Analytics, UK.
Built the initial search engine to provide ad-hoc search access to real-time tweets utilising a retrieval approach based on my thesis.
- 2011–2015 **University Tutor**, *Computing School*, University of Glasgow, UK.
Supervised multiple student groups. Evaluated and provided students with personalised help on their practical assessments
- 2009–2015 **Library Demonstrator**, *Computing Help Desk*, University of Glasgow, UK.
Ensured the smooth running of the library computing services and providing students with technical assistance.
- 2008 **Software Developer**, *School of Psychology*, University of Glasgow, UK.
Software development and data processing assistance on brain imaging data for a MoD-sponsored project supervised by Prof. Frank Pollick

Collaborations

- **Ten Assumptions About Artificial Intelligence That Can Mislead Patent Law Analysis**
Research paper examines a set of assumptions about artificial intelligence, often taken as factual premises in discussions regarding 'artificial ingenuity' - 2021
(https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3910332)
- **How Much Do Consumers Value Interoperability?** Research paper utilising web scrapped data on sales and reviews of DVD players to study the effects of DRM. - 2017
(https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2998767)

Education

- 2011–2017 **PhD in Information Retrieval**, University of Glasgow, UK.

Thesis Details

- Title *Microblog Retrieval. Challenges and Opportunities*
- Supervisor Professor Joemon M. Jose
- Description Explores the problems faced by the state-of-the-art retrieval models when utilised under microblog ad-hoc retrieval conditions. A number of retrieval techniques were developed to improve ad-hoc retrieval performance of microblogs covering information retrieval areas such as: *retrieval models*, *automatic query expansion*, and *query performance prediction*.

Publications

- Jesus A. Rodriguez Perez, and Joemon M. Jose. "On Microblog Dimensionality and Informativeness" Proceedings of ICTIR 2015.
 - Jesus A. Rodriguez Perez, and Joemon M. Jose. "Predicting Query Performance in Microblog Retrieval" Proceedings of the 37th ACM SIGIR conference. 2014.
 - Jesus A. Rodriguez Perez, et al. "On using inter-document relations in microblog retrieval." Proceedings of the 22nd international conference WWW 2013.
- 2006–2011 **Bsc in Computing Science**, University of Glasgow, UK.
Dissertation on collaborative search. Published as *CoFox: a visual collaborative browser* in CIKM2011 (<http://www.cikm2011.org/>)

Flat 3/2, 41 Braeside Street – Glasgow, Lanarkshire

H 07516881104 • B rpsoft@gmail.com • dcgla.ac.uk/jesus

Data Specialist and PhD on Information Retrieval

Awards

- 2014 **First Prize (£20000) at Future Cities Hackathon 2014**, Glasgow.
Web tool to assess road quality, traffic and other road events. (Team of 5)
- 2013 **First and “people’s choice” prizes at Amazon Hackathon 2013**, Edinburgh.
Web application to map drug usage across the country from a NHS dataset. (Team of 3)

Computer skills

Web development	NodeJS, ReactJS, ExpressJS, MaterialUI, PHP, JQuery, SQL, XQuery, HTML5, CSS
Technologies	Hadoop, Machine Learning(SKlearn & Weka), Lucene, WordNet, Unity
Operating Systems	Advanced user of Debian-based distributions, Advanced Windows User
Games Development	Unity with C# (Android)

Languages

Spanish	Mothertongue
English	Fluent
French	Basic Command

Interests

- Composing Music
- Gaming
- Climbing
- Martial Arts
- Guitar & Bass
- Games development
- Football
- Cooking