Dr. Juan Carlos Roldán

Co-founder & CTO @ Stargazr | Data extraction researcher

linkedin.com/in/jcarlosroldan juancarlos@sevilla.es May 12, 2023

I started my research career in 2014, focused on enterprise data integration. I prefer hybrid research approaches to incorporate R&D into industry development cycles. In 2020, I launched an AI-based fintech company that leverages the knowledge generated during my PhD. My personal interests include climbing, making music and space exploration.

Work experience

2020 - now Co-founder & CTO

Seville, Spain Stargazr Inc.

Los Angeles, USA Founded a fintech startup to improve profitability in manufacturing Hamburg, Germany companies. Currently in pre-seed stage, it's already present in three

continents, have 10+ FTEs and raised \$2.5M total funding.

2019 - now Substitute Teacher

Seville, Spain University of Seville

Researching new approaches to information extraction focused on reinforcement learning, knowledge graphs and quantum annealing. Lecturing related subjects such as Intelligent Information Systems.

2018 – 2019 Visiting Researcher

Los Angeles, USA USC Information Sciences Institute, sponsored by Fulbright

I researched on unsupervised web table extraction. The results are deployed into a IARPA geo-political forecasting tool called SAGE and

a search engine for datasets and APIs called DataMart.

2015 - 2021 Researcher

Seville, Spain University of Seville

Worked on the creation of automated machine learning techniques for web information extraction, which led to several international

collaborations and industrial applications.

2014 - 2015 Research Intern

Seville, Spain University of Seville

Researched on detecting keywords in the Spanish Twitter and cluster them into topics. The result has been cited several times and was used to predict the evolution of COVID-19 in LATAM countries.

Formal education

2016 - 2020 Ph.D. in Computer Science

Seville, Spain University of Seville – Honors: Cum Laude

2015 - 2016 M.S. in Computer Science

Seville, Spain University of Seville – GPA: 9.28 / 10

2011 - 2015 B.S. in Software Engineering

Seville, Spain University of Seville – GPA: 9.02 / 10

Journal articles

January 2022 Information Fusion *Under review* TOMATERA: A tool to support table extractors. **January 2022** Knowledge and Information Systems Published A hybrid quantum approach to leveraging data from HTML tables. January 2022 Applied Soft Computing Published A coral-reef approach to extract information from HTML tables. **December 2022** Information Sciences Published On Exploring Data Lakes by Finding Compact, Isolated Clusters. **November 2021** Information Processing & Management Published A genetic clustering approach to extracting data from HTML tables. **June 2020** Software, Practice and Experience Published On the synthesis of meta-data tags for HTML files. May 2020 Enterprise Applications of Artificial Intelligence *Under review* A clustering approach to extract data from HTML tables. **May 2020** Information Sciences Published TOMATE: Online Multi-document Automated Table Extraction. November 2019 Knowledge-based Systems Published On extracting data from tables that are encoded using HTML. June 2015 Advances in Distributed Computing and Artificial Intelligence Published An approach to discover keywords from tweets using Wikipedia.

Conferences and public talks

November 2019 TechCrunch Disrupt
Invited to the Startup Battlefield 200.

November 2019 Google DGPH
Manila, Philippines Talk at the keynote track "Turning web data into knowledge".

June 2019 Business Information Systems
Seville, Spain Part of the organising committee of the conference.

October 2017 ACM/IEEE Symposium on Edge Computing
San José, USA Presenting "Extracting web data using representation patterns".

June 2016 Practical Applications of Agents and Multi-Agent Systems
Seville, Spain Presenting "Kizomba: unsupervised heuristic-based extraction".

I+D projects

2020 - 2022 DESK

39,446 € Ministry of Economic Affairs and Digital Transformation

2016 - 2020 VORTEX

117,666 € Ministry of Economy and Business

2014 - 2017 ISIDORO

142,375 € Ministry of Economy and Business

2013 - 2015 PISCIS

239,342 € 04INNOVA24H, Indra