

#### **Education**

University of Alcalá Alcalá de Henares, Spain

Ph.D in Computer Science, Applied Mathematics Department

- · Advisors: David Orden and Iván Marsá
- Participated in Intensive Research Program in DCCG, with Housing Accommodation Grant (Barcelona, Apr Jun, 2018)
- · Visiting researcher under Jorge Urrutia at Universidad Nacional Autónoma de México (Ciudad de México, Aug-Sep, 2018)

#### Polytechnic University of Madrid (UPM)

Madrid, Spain

Sep. 2016 - Sep. 2017

Feb 2018 - PRESENT

M.Sc in Artificial Intelligence

- Masters Thesis (advisor: Antonio Jiménez): Aircraft loss of separation prediction using Bayesian networks
- · Selected projects:
  - Implemented a Convolutional Neural Networks automatic news classifier and a QA
  - Implemented an ant colony optimization algorithm for TSP with genetic algorithm parameter tuning
  - Developed an ontology of eSports with OWL+ELK

University of Alcalá Alcalá de Henares, Spain

**B.S. IN COMPUTER SCIENCE AND ENGINEERING** 

- Sep. 2012 Jun. 2016 Semester at Oxford Brookes + Cambridge Advance Exam (Sep.2015-Feb 2016)
- Member of Student Council Board of Directors
- End-Of-Degree Project (with Distinction Award): Study of theoretical upper bounds and computational approximations to the Spectrum Graph Coloring problem

## Work Experience \_\_\_\_\_

University of Alcalá Alcalá de Henares, Spain

RESEARCHER & TA

· Discrete Mathematics course TA

Feb. 2018 - PRESENT

**CRIDA ATM R&D** Madrid, Spain

RESEARCH INTERN Jan. 2017 - Sep. 2017 Junior data analyst working on H2020 SafeClouds project: collection, pre-processing and modelling of airborne safety conflicts data

- · Other projects: speech recognition, extracting knowledge out of cross-lingual controller conversations
- · Implemented Vaadin framework views for Spanish air traffic authorities decision-making software PERSEO

University of Alcalá Alcalá de Henares, Spain

Undergraduate Researcher for European Project ICEBERG in Software QA

Jan. 2015 - Jun. 2015

· Defined model-based processes to identify software development activities resulting from poor software quality

#### Honors & Awards

2018-2019	Faculty Training Doctoral Fellowship, (FPU)	University of Alcalá
2017	Free Tuition Award for M.Sc, (top 3% of the year)	UPM
2016	Extraordinary End-Of-Degree Award, (top of the graduating class)	University of Alcalá
2015	<b>Undergraduate Researcher Fellowship</b> , (for top 10 undergraduate researchers in University)	University of Alcalá

### Publications

**Detecting inclusions for**  $\mathcal{O}$ -convex hulls of bichromatic point sets, Carlos Alegría-Galicia, Ana 2019? In preparation Álvarez-Suárez, David Orden, Carlos Seara, Jorge Urrutia

Spectrum graph coloring to improve Wi-Fi channel assignment in a real-world scenario via edge

2018 contraction, Discrete Applied Mathematics, David Orden, Ivan Marsa-Maestre, Jose Manuel

Gimenez-Guzman, Enrique de la Hoz, Ana Álvarez-Suárez

# Skill Summary\_

Python (OpenCV, sk-learn, Pandas, NetworkX, matplotlib, TensorFlow), R, MATLAB, Java (Weka), Scala, SQL, Talend, Hadoop, Linux, Git Language Skills: English (fluent), Spanish (native), Japanese (intermediate) (4-year postgraduate Japanese course), French (basic)