

David Azcona

Data Scientist & Researcher

Data Scientist with an interest in applied Machine Learning & Artificial Intelligence for social good



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EDUCATION

PhD in Artificial Intelligence Dublin City University (DCU)

2015 – 2019

1st. class honours

Fulbright Visiting Researcher Arizona State University (ASU)

2017 – 2018

MSc in Data Analytics Dublin City University (DCU)

2013 – 2015

1st. class honours (ranked 2nd)

BSc in Computer Science Public University of Navarre (UPNA)

2007 – 2011

1st. class honours

WORK EXPERIENCE

Postdoctoral Researcher Insight Centre for Data Analytics at DCU

Tasks & Achievements

- Collaborate with researchers, lecturers and industry partners to develop new Intellectual Property
- Authored top-ranked publications and media articles

Laboratory Assistant DCU's School of Computing

2014 – 2019

Ireland

Tutoring a variety of courses including:

- Programming I in Python
- Object Oriented Design and Implementation in C++
- Data Structures and Algorithms in Java

Software Engineer IBM Dublin & Brussels

2012 – 2015

Ireland

Tasks & Achievements

- Monitored, analyzed and reported issues on 200+ servers in 6+ environments daily
- Reduced the server shutdown time by 90%, which brought stability to production & improved performance

Software Developer Ingeteam

2011 – 2012

Spain

Tasks & Achievements

- Developed wind power analytics platforms that were utilized by Vestas, Siemens Gamesa & Acciona

CONCEPTS

Artificial Intelligence

Machine Learning

Embeddings

Data Mining

Networks

PROJECTS

PredictCS: Personalizing Computer Science Education

- Machine Learning Predictive Analytics Models that identify students "at-risk" in Computer Science and personalize the way they learn the skills by sending material and code solutions
- Technologies: Python, Pandas, Numpy, Scikit-learn, Keras, Docker
- Achieved student engagement with the recommendations which improved their performance between 4% and 9%
- Published and presented at top conferences in Educational Data Mining such as LAK, EDM, AIED; and journals including IEEE TLT

Prometheus: Deep Learning Fire Detector 🔗

- Combination of auto-piloted drones & Computer Vision to detect wildfires while they are still in their early stages
- Trained a Deep Neural Network using transfer learning technologies & AlexNet, CUDA, Microsoft CNTK & Azure, Docker
- Partnered with Arizona State University & Arizona Fire Department
- Microsoft Imagine Cup Awards: USA 1st. place in Artificial Intelligence & 4th overall. World Finals: Top-6 in AI & Semifinalists

Embeddings & Representation Learning on Irish Politics 🔗

- Trained a Neural Network with an Embeddings layer to learn representations of Irish Senators and Deputies based on their votes
- Authored an article featured on RTÉ Brainstorm (Irish media)

Marketplace for Students & Researchers

- Information Retrieval software that matches students seeking on-campus jobs and researchers looking for annotators using Lucene
- DCU's Ryan Academy Accelerator Program awardee

FinTech: Trust Score for Students getting Loans

- Students' creditworthiness combining banking and social data
- Winners at Ulster Bank's FinTech Hackathon In Dogpatch Labs

Huawei Celebrity Hunt: Deep Learning Face Recognizer

- Crawled the web for pictures, learned embeddings using CNN with CUDA and detected the celebrity using triplets & similarity learning
- Huawei's Vision Challenge in Ireland: 4th place and 2nd fastest

Tensorflow & ImageNet Object Detection Android App

- Special Mention award at Startup Weekend in Google Ireland

Coding volunteering at low-income schools in Arizona

- Led a group of grad students & was awarded funding by ASU

INTERESTS

Football

Travelling

Coaching

Hackathons