FRANCESCO M. FERRARI

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EMPLOYMENT

Data Scientist at Microsoft Technology & Research, London, UK   March 2016 - September 2016
- Worked on customer profiling using LDA, users-to-vectors, etc.
- Worked on models to predict the demographic of users (age inference, gender inference, etc.)
- Worked on event-predictions models (predicting AMA winners, Oscars, etc.)
- Built a highly flexible pipeline to analyse and augment the current language data. It was made available across different teams in order to automate specific processes.

Software Engineer at Swiftkey (full-time), London, UK   Aug 2015 – March 2016
- Worked in the Data Insights team on big data
- Used Apache Spark to process users' language models stored on cloud
- Worked on sentiment classifiers, topic modelling analysis, language patterns recognition, word2vec models and recurrent neural networks for emoji predictions.

Software Engineer / Full stack developer at Cisco (part-time)   Sep 2014 – Jul 2015
- Worked on the integration of different Cisco products using APIs and as full-stack developer for demos and proofs of concept.
- Improved searchability of Cisco research papers by building a Solr server

Software Engineering Intern at Cisco (full time), San Jose, CA   Aug 2013 – Jul 2014
- Learnt web development skills: Built 4 web apps for Cisco throughout the year, all subdomains of cisco.com: dev-innovate.cisco.com, techfundfinance.cisco.com, ciip.cisco.com, research.cisco.com, developed using Django.
- Improved business and strategy skills while working with the senior director of Strategy and Planning.
- Built first public platform using new Cisco cloud technology running on top of Openstack
- Exposed to high level projects (one of my apps was presented during one of the executive keynotes at Cisco Live SF 2014 conference; ~25k attendees)

EDUCATION AND QUALIFICATIONS

University of California, San Diego
MSc in Computer Science and Artificial Intelligence   Sep 2016 - Present
- Focusing on AI/Machine Learning modules including robotics and graphical models.

University College London   London, UK
BEng Electronic Engineering with Year in Industry   Sep 2011 – Jun 2015

- Current qualifications: First Class Honours (84% - Top of the year), including Electronic Circuit: 97%, Mathematics: 90%, Digital Circuit: 94%
- Modules: Supervised Learning, Reinforcement Learning, Kernel Methods, Objected-Oriented Programming, Linear Algebra, Optoelectronics, Digital Design, Electronic Circuits, Control Systems, Digital Signal Processing, Optoelectronics, etc.
- My thesis involved Machine Learning and Data Mining. It consists in pattern recognition of pedestrians using indoor positioning technologies.

London School of Economics   London, UK
Intensive course in Business and Strategic Management   Jul 2012 – Aug 2012

PROGRAMMING SKILLS

Python, Advanced: main programming language used at Cisco and PlayCity (personal project)
Java, Intermediate: Followed two modules at university.
C++, Beginner: mostly worked with C++ when using ROS
MatLab, Intermediate: Following a course on practical application of Supervised Learning using MatLab.
Web frameworks: Django (Advanced) and Flask (Intermediate).
Databases: PostgreSQL (Beginner)
Front End: Javascript(Beginner), HTML5(Advanced), CSS3(Intermediate), Template Tags(Jinja)

API: Experience with Facebook, Linkedin and Twitter APIs. Built also APIs in Python for PlayCity's mobile app.
Linux: Experience in setting up servers on Linux VMs.
Apache Spark, Intermediate: My job at Microsoft and Swiftkey involved Spark on a daily basis.
Others: Solr (beginner), Scala (beginner - built a pipeline while working at Swiftkey using Scala)

ACHIEVEMENTS AND AWARDS

The IET Prize, IET, London 2015
Awarded for best performance in both the MEng and BEng degree course in Electronic Engineering.

Member of the Dean's List, UCL, London 2015, for outstanding academic achievement

The Rank Taylor Hobson Prize, UCL, London 2015
Awarded the Rank Taylor Hobson award for the project 'Pattern Behaviour Recognition for Pedestrians' in the 3rd year of my undergraduate degree in Electronic Engineering at UCL.

1st Prize Winner of Hack Palo Alto Competition, Palo Alto, California, 2014
(http://www.forbes.com/sites/sap/2014/06/01/civic-innovation-thrives-in-silicon-valley/)

1st Prize Winner in the Physics Olympiads Award, Lodi Province, Italy, 2011

Member of the Mensa Society, 2008-2012

Member of the Oklahoma Honour Society, OK 2010, for outstanding academic achievements**, 2010

Montanaso Lombardo Scholarship, Italy: Secured seven scholarships from the town council of Montanaso Lombardo, 2006-2011 and 2016

POSITIONS OF RESPONSIBILITY

CEO and Founder of PlayCity, Inc. www.playpaloalto.com
Feb 2014 – Jan 2015
- PlayCity is a social platform that aims to increase the level of civic engagement involving local businesses, charities and residents.
- Took care of customer relations with several stake holders (charities, city manager of Palo Alto, CIO of Palo Alto, law firm)
- Built the whole web app (back-end and most of the front-end) using Django
- Built APIs written in Python for the mobile app
- Improved management techniques organizing other team members using agile methods like Scrum

Mentor, UCL, 2012-2013
Mentored a group of 15 first-year students. Helped them with unclear topics encountered during lectures.

Co-Founder and President of The Engineering Pipeline, 2012
A social enterprise that promotes Electronic Engineering in UK high schools and develops engineering projects.

School Representative, 2010-2011
Successfully served as student voice between the school and the province of Lodi, Italy, by bringing the gap between student ideas and channelling them to final manifestation.

Science Club President, 2009 – 2010
Developed leadership skills by planning meetings and scientific trips to the science museum of Oklahoma City.

OTHER SKILLS AND INTERESTS

Languages: Italian (native), English (fluent), Spanish (intermediate)