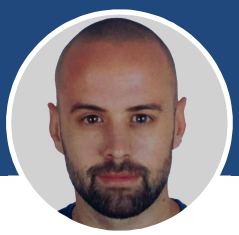

VÍCTOR MARTÍNEZ GÓMEZ

Computer Engineer • Data Scientist

victormartinezgomez1989@gmail.com • https://github.com/fvictor
Currently living in Granada, Spain • Born in 1989

EDUCATION

Since 2014 — University of Granada
Doctor's Degree in Supervised Data Mining in Network Data
Thesis defence scheduled for September
A four-year PhD thesis in network data mining, focusing on the development of new link prediction techniques and novel applications to solve real-world problems.

2013–2014 — University of Granada
Master's Degree in Soft Computing and Intelligent Systems
Grade: 9.65 of 10
A one-year university master's degree in machine learning and artificial intelligence.

2007–2013 — University of Granada
Computer Engineering
Grade: 7.76 of 10
A five-year university degree in computer engineering.

PROJECTS

Since 2014 — *Java*
NOESIS
http://noesis.ikor.org/
A framework for network data mining that provides a large collection of parallelized network analysis techniques, such as link prediction and community detection.

2018 — *Python*
NOESIS for Python
https://github.com/fvictor/noesis-python
A Python API for the NOESIS framework that provides access to a large number of network-related algorithms.

2017 — *Javascript Node.js*
TUORIS
https://github.com/fvictor/tuoris
A middleware for SVG distributed visualization in scalable resolution tiled display walls, especially suited for the visual representation of big data.

2012-2013 — *Python MATLAB JavaScript HTML/CSS*
ProphNet • DrugNet
http://genome.ugr.es
Tools, based on novel algorithms, for the prediction of candidate genes associated to complex diseases and new uses for existing drugs.

More projects in my GitHub profile

LANGUAGES

English — **Upper-intermediate**

Spanish — **Native**

EXPERIENCE

Since 2014 — University of Granada
PhD student
Four years researching and developing new machine learning techniques and applications for network data from different domains. Implementation of a large number of algorithms and evaluation experiments. Writing of several scientific publications, which were published in high-impact scientific journals.

2017 — Imperial College London
Visiting research fellowship
Four months as visiting researcher at the Data Science Institute, part of Imperial College in London, where I studied and developed new tools for large-scale data visualization on their Global Data Observatory (GDO).

2014 — Real-Time Innovations
Software developer intern
Six months developing the new template-based system for the RTI code generator, called *rtiddsgen*. The new system replaced the old one and is facilitating the generation of code for new hardware platforms. I also fixed several pending bugs in other components.

2012-2013 — University of Granada
Hired researcher
Eleven months studying and developing a new machine learning-based methodology for drug repositioning under the project *"Approach to Genetic Networks related to Diseases through Artificial Intelligence"*. The results were published in a scientific journal and motivated further research.

2011-2012 — University of Granada
Research fellow
Eleven months researching and designing a novel method for the prediction of candidate genes associated to complex diseases using machine learning. The results were published in a peer-reviewed journal and presented in international congresses.

SKILLS

Data mining, machine learning, and artificial intelligence
data preprocessing • classification • regression • clustering • anomaly detection • recommender systems • deep learning • network analysis • natural language processing
Theoretical and applied knowledge, with capacity to design new machine learning algorithms.

Business intelligence
data visualization • big data (with PySpark)

Programming languages
Python • Java • C/C++ • HTML • CSS • JavaScript

PyData stack
NumPy • SciPy • Pandas • Matplotlib • Scikit-learn • Keras

Databases
SQL • MongoDB

Computer science
algorithm design • data structures • parallel and distributed processing • complexity analysis

Software development
software design • design patterns • object-oriented programming • testing • user interfaces • version control tools (GIT)

CERTIFICATIONS

2018 **Advanced Python for science and engineering**
Doctoral School of Sciences, Technologies and Engineering, University of Granada
12 hours course completed with "distinction".

2017 **Machine learning**
Coursera, Stanford University, Andrew Ng
Achieved a grade of 98.4%.

2017 **Entrepreneurial route**
Research Transfer Office, University of Granada
24 hours course completed with "*distinction*".

2014 **Social and economic networks: models and analysis**
Coursera, Stanford University, Matthew O. Jackson
Achieved a grade of 87.4%.

2013 **Advanced Python programming**
UGR General Foundation and *Cevug*
30 hours course completed with "*distinction*".

2012 **Introduction to Python programming language**
UGR General Foundation and *Cevug*
30 hours course completed with "*distinction*".

PUBLICATIONS

2017 **A survey of link prediction in complex networks**
ACM Computing Surveys

2017 **ProphTools: General prioritization tools for heterogeneous biological networks**
GigaScience

2016 **Adaptive degree penalization for link prediction**
Journal of Computational Science

2015 **DrugNet: Network-based drug-disease prioritization by integrating heterogeneous data**
Artificial Intelligence in Medicine

2014 **ProphNet: A generic prioritization method through propagation of information**
BMC Bioinformatics

CONFERENCES

2017 **Probabilistic local link prediction in complex networks**
International Conference on Scalable Uncertainty Management (SUM)

2015 **The NOESIS open source framework for network data mining**
International Conference on Knowledge Discovery and Information Retrieval (KDIR)

2013 **Network-based drug-disease relation prioritization using ProphNet**
International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO)

2012 **Network-based gene-disease prioritization using ProphNet**
International Workshop on Network Tools and Applications in Biology (NETTAB)