ELISA GÓMEZ DE LOPE

BIOINFORMATICS & DATASCIENCE

4367 - Luxembourg

linkedin/elisagdelope

github/elisagdelope

WORK EXPERIENCES

Doctoral researcher
Biomedical Data Science group in LCSB

Sep 2020 – Present

Integrative machine learning methods for the joint analysis of different types of omics, clinical and imaging data from patient and control subjects.

Marie Curie Early Stage Researcher (fellowship award)
Marie Sklodowska Curie Action Helical ITN – Firalis SA

June 2020 – July 2020

Data scientist
Accenture Applied Intelligence - Analytics

Mar 2019 – June 2020

Data driven projects on sales forecast (time-series and ML), computer vision (OCR) and statistics for fraud detection. Python, R and visualization tools.

Junior Data Analyst
Capgemini

Sep 2018 – Mar 2019

Access and analysis of data. Project based on a financial services client within the area of business intelligence (systems decisions).

Bioinformatician
Pharmacelera SL

Feb 2018 – Jul 2018

Parametrization and benchmarking of QM hydrophobicity descriptors in ligand-based virtual screening. I developed a pipeline reaching speedup x30 with no loss of accuracy.

Université de Fribourg , Switzerland
Bioinformatics Internship

Feb 2017 – Jul 2017

Genomics at Daniel Wegmann's lab for my bachelor thesis. Inferring population genetic structure from ancient DNA of the Tollense battlefield.

National Biotechnology Center (CNB)
Biotech Research Internship

Aug 2015 – Sep 2015

Universidad Politécnica de Madrid
Project Assistant

Jan 2015 – Jun 2015

COMPUTING SKILLS

- **Scripting**: Python, R, Bash, Perl
- **Data mining and database analytics**: SQL, R, SAS, MS Excel
- **Machine learning**: Python and R packages for DS (scikit learn, ...)
- **Deep Learning:** Pytorch, Keras.
- **Version control system:** Git
- **Simulations**: Matlab, Blender, VisBasic
- **HPC user**

- **Bioinformatics tools:** FastQC, GATK, ATLAS, VCFtools, SAMtools, Pymol, swisspdbviewer
- **Google Cloud Platform**: BigQuery, Google Cloud Storage, Google Cloud Compute Engine
- **Web** (basic): HTML, CSS, javascript
- **Agile methodologies**: Kanban, JIRA

Place of Birth: Madrid
Nationality: Spanish
Drivers' license & car available

University of Luxembourg
PhD in Biomedical Data Science

Sept 2020 – Present

Integrative machine learning methods for biomarkes in Parkinson disease, including the joint analysis of different types of omics, clinical and imaging data.

Universitat de Barcelona
Postgraduate in data science and big data

Sept 2019 – Sept 2020

Exploratory analysis and visualization, Bayesian statistics. Linear models, Naïve Bayes and random forests, recommenders, graph analysis, deep learning.

Universitat Autònoma de Barcelona
MSc Bioinformatics for genomics and drug discovery

Sept 2017 – Jul 2018

Bioinformatics tools to study large-scale biological data. Scripting, statistics, NGS analysis and genomics, structural biology and drug design.

Universidad Politécnica de Madrid
Biotechnology

Sept 2013 – Jul 2017

Engineering basis with focus on biocomputing, genetics, protein and drug design, microbiology and biochemistry.

Excellence - Baccalaureate program
Science High School

Sept 2011 – Jun 2013

For students with outstanding academic record. Baccalaureate with high standards.

AWARDS & ACHIEVEMENTS

Awards
- Scholarship for Excellence in High School
- Scientists Summer Campus scholarship
- St. Viator National Research Award in Science for the project *"Un cacao de disoluciones"*
- Third prize winner in Critical Care Datathon Tarragona 2018
- Pytorch Deep Learning Scholarship Challenge by *Facebook, Inc*.
- Marie Slodowska-Curie Fellowship 2020

Achievements
- University Access Assessment (PAU 2013): 12.94/14
- CAE (English C1)
- DELF B2 (French B2)
- Deeplearning.ai specialization
- Volunteering at *Pint of Science*, *Biotech Annual Congress* and *AJC-CAL*.

LANGUAGES

✓ Spanish (native) ✓ English (C1) ✓ French (B2) ✓ Italian (A2) ✓ Catalan (B1)

PROFILE AND PERSONAL ABILITIES

- **Social skills** of cooperation and teamwork, personal achievement and autonomy, public speaking and team building.
- **Values** of empathy, solidarity, responsibility, commitment and full immersion in the projects I'm involved in and also self-criticism.
- **Multilingual:** Fluent in English, French and Spanish; currently learning Catalan.
- **Extensive international travelling and wide team working experience.**
- **Effective written and oral communication skills.**

AI Saturdays BCN Fellow & mentor
Study groups from the basis to novel techniques in AI.
I started with a scholarship and am currently helping new students as a mentor.

Pint of Science BCN 2019
Organizer at the scientific festival Pint of Science. Contact, management and logistics of speakers coming from tech start-ups. Talks aimed to bridge the gap between science and society.

Biotechnology Annual Congress 2019
Organizer, congress' website management and logistics.

School support teacher (2013-2017)
Freelance tutor for children and teenagers with scholar needs.

Leisure activities instructor (2013-2017)
Volunteer-working as leisure staff at a youth association devoted to children.

International student in Switzerland (2017)
Courses at Université de Fribourg, internship and Bachelor Thesis

International student in France (2010)
Courses at Lycée Saint Thomas d'Aquin, epecialization Science