ELISA GÓMEZ DE LOPE

BIOINFORMATICS & DATASCIENCE









2155 - 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

OTHER HIGHLIGHTS

Advisor at Farmelody

Advisor on microbiome data modelling and analysis for tailored recommendations on farms' animals' health

Al Saturdays BCN Fellow & mentor

Study groups in Al. 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.

Biotechnology Annual Congress 2019

Organizer, congress' website management and logistics.

School support teacher (2013-2017)

Freelance tutor for children & teenagers with scholar needs.

Leisure activities instructor (2013-2017)

International student in Switzerland (2017)

International student in France (2010)

EDUCATION

University of Luxembourg

PhD in Biomedical Data Science

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

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

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

Universidad Politécnica de Madrid

Biotechnology

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

Excellence - Baccalaureate program

Science High School

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

AWARDS & ACHIEVEMENTS

Awards

- Pelican Award 2021 by Fond. de Luxembourg
- Marie Slodowska-Curie Fellowship 2020
- Pytorch DL Scholarship Challenge by Facebook, Inc & Udacity 2018
- Third prize winner in Critical Care Datathon Tarragona 2018 by MIT Critical Care Unit
- Academic Excellence Scholarship 2013
- St. Viator National Research Award in Science for the project "Un cacao de disoluciones" 2011

Achievements

 University Access Assessment (PAU 2013): 12.94/14

Sept 2020 – Present

Sept 2019 – Sept 2020

Sept 2017 - Jul 2018

Sept 2013 - Jul 2017

Sept 2011 – Jun 2013

- CAE (English C1)
- DELF B2 (French B2)
- Deeplearning.ai specialization
- +7 ys volunteering experience
- Board member at ISCB Lux
- Global Shaper at Global Shapers Luxembourg city hub

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 teambuilding.
- **Values** of empathy, solidarity, responsibility, commitment and full immersionin 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 communicationskills.