

# Javier Domínguez Segura

Madrid, Spain

(+34) 608 362 377 | [jdominguez.ieu2023@student.ie.edu](mailto:jdominguez.ieu2023@student.ie.edu) | [LinkedIn](#) | [Github](#) | [Personal Website](#)  
Work Permits (if applicable and advantageous) | Eligible to sign an internship agreement via IE University

## EDUCATION BACKGROUND

### IE University

Madrid, Spain

*Bachelor of Science in Computer Science & Artificial Intelligence,*

*Expected: July 2027*

- GPA: 96.3/100 (Top of class, Dean's List)
- Relevant Coursework:
  - Machine Learning & AI: ML Fundamentals (A+, honors), AI Fundamentals (A+), Natural Language Processing (in progress), Computer Vision (in progress), Reinforcement Learning (in progress)
  - Mathematics: Linear Algebra (A+), Probability for CS (A+), Calculus II (A+), Discrete Math (A), Physics (A)
  - Software Engineering: Databases (A+, honors), OS & Networks (A), Computer Architecture, C Programming (A+, honors), Data Structures & Algorithms (A-), DevOps (in progress), High-Performance Computing (in progress)
  - Business & Entrepreneurship: Intro to Business Management (A+, honors), Entrepreneurship (A+)

## PROFESSIONAL EXPERIENCE

### Kronos Technology - Web Development Agency

Gran Canaria, Spain

Co-founder / Lead developer

January 2022 - November 2023

- Designed and deployed a production-ready booking platform used by multiple businesses, enabling thousands of monthly reservations and reducing manual scheduling effort by 40%.
- Built with Python/Django, MySQL, Redis, firebase (auth and analytics), Stripe (payment) and deployed on AWS with CI/CD

### STRIDE Research Labs, U.S. NSF Program - HPC & AI Lab

Madrid, Spain

Research Intern

Summer 2025 - Present

- Designing HPC middleware for agent-based workflows on NCSA Delta supercomputers through NSF's ACCESS program. Partnering with the RADICAL research lab at Rutgers University on the Integrated Machine-learning for Protein Structures at Scale (IMPRESS) project.

## AWARDS & HONORS

**EduCaixa The Challenge** – Selected among international teams (<0.02% acceptance) to conduct big data research on high-school dropout rates; presented findings in Silicon Valley with workshops by Google, and Apple employees and Stanford students. ([source](#))

**IE Entrepreneurship Award** – Merit-based scholarship awarded to students with outstanding entrepreneurial potential. University awarded.

**Dean's List, School Of Science & Technology**— Recognized for top academic performance across multiple semesters ([source](#)).

## PROJECTS

### Flowgentic — HPC Agentic Framework Integration ([Github](#)) | Summer 2025 - Present

- Built open-source Python package enabling agent frameworks (LangGraph, CrewAI, AG2) to run on HPC schedulers with minimal code changes, designed for developer ergonomics and production workflows.
- Integrated LangGraph with RADICAL AsyncFlow for concurrent agent execution; actively used by researchers at Rutgers University for the IMPRESS project (protein structure ML at scale on NCSA Delta supercomputers). Developed during NSF-funded research at STRIDE Research Labs

### Efficient Classifier — Open-Source ML Framework | [\[PyPI/GitHub link\]](#) | Spring 2025

- Developed a dataset-agnostic machine learning framework for rapid prototyping and deployment of classification pipelines on tabular data.
- Achieved 92% F1-score on CCCS-CIC-AndMal-2020 (Android malware detection, 50K+ samples), outperforming baseline approaches by 10% for certain models.

## ACTIVITIES & LEADERSHIP

### IE Student Government,

Madrid, Spain

*Class representative*

September 2023 – Present

- Elected to represent and advocate for the academic needs of 100+ Computer Science students to university administration and faculty.
- Drove curriculum adjustments and influenced resource allocation decisions by synthesizing complex student feedback and presenting data-backed proposals to stakeholders.
- Successfully negotiated for the implementation of new academic resources, directly improving the educational experience for the entire cohort.

## ADDITIONAL INFORMATION

- **Languages:** Spanish (Native). English (Fluent, 3 years, daily use). German (Intermediate).
- **Technologies & Tools:** Python, SQL, Pandas, Numpy, Scikit-learn, Pytorch, Hugging Face, Langgraph, Apache Spark, BigQuery
- **Personal interests:** poker, history books, basketball, triathlon