



# IVAN EGUIDAZU GURUCEAGA

## Lead Data Scientist

Extensive experience in Product Design and Development across three sectors: digital, aerospace, and concentrated solar power energy.

Currently leading the Data Science group for digital product development at SENER.

I enjoy the challenge of conceiving, designing, and executing new products that address measurable needs and problems from scratch to deployment. Experienced in tackling complex technical and team management issues, with strong adaptability to different working methods.

### PROFESSIONAL EXPERIENCE

2018-Act. **SENER Digital | Lead Data Scientist**

Main Activities:

- Solution architecture specification, cost estimation, and timeline definition.
- Formulation of optimization algorithms and ML/DL models.
- Development of calculation, prediction, and optimization services.
- Testing, code review, and repository management.
- Production deployment (Azure & AWS) and incident management.

Key Projects:

- EMS: Energy Management System for the optimal operation of microgrids, hybrid generation, and energy storage systems.
- SHM: Structural Health Monitoring (experimental modal analysis) for ADIF's high-speed rail viaducts.
- Ten+TaD: Management and planning of an on-demand transportation vehicle fleet in Tenerife.
- ORUGA®: Optimal design tool for PV Solar Fields and Earthworks.
- RESPIRA®: Multi-objective optimization of HVAC system operations.
- Oplmp: Layout/Floorplanning optimization.

2014-2018 **SENER Energía | Product Development Engineer, Project Engineer**

Main Activities:

- Mechanical analysis and design of heliostat and solar field components.
- Wind tunnel testing and wind load specification.
- Solar field performance analysis and probabilistic design.

Project: NOOR-III Power Tower Plant (Morocco)

2012-2014 **SENER Aeroespacial y Defensa | Mechanical Engineer**

Main Activities:

- Static and dynamic FEM analysis of Flip Mirror Subsystem components
- Assembly, Integration and Testing (AIT). Qualification campaign of 1 engineering and 2 flight units.

Project: Flip Mirror Subsystem, SLSTR instrument, Sentinel-3 satellite

2009-2012 **SENER Energía | Product Development Engineer**

Main Activities:

- Mechanical analysis and design of solar receiver, heliostat, and solar field components.
- Design, implementation, and commissioning of solar Aiming Strategy control software.

Project: GEMASOLAR Power Tower Plant (Seville, Spain)

### EDUCATION & CERTIFICATIONS

2009 **MSc in Mechanical Engineering**, UPV/EHU Bilbao

2009 **MSc in Aerospace Engineering**, UPV/EHU Bilbao

2018 **Postgraduate in Optimization Methods and Models**, UNED

2019 **Postgraduate in Statistical Learning and Data Mining**, UNED

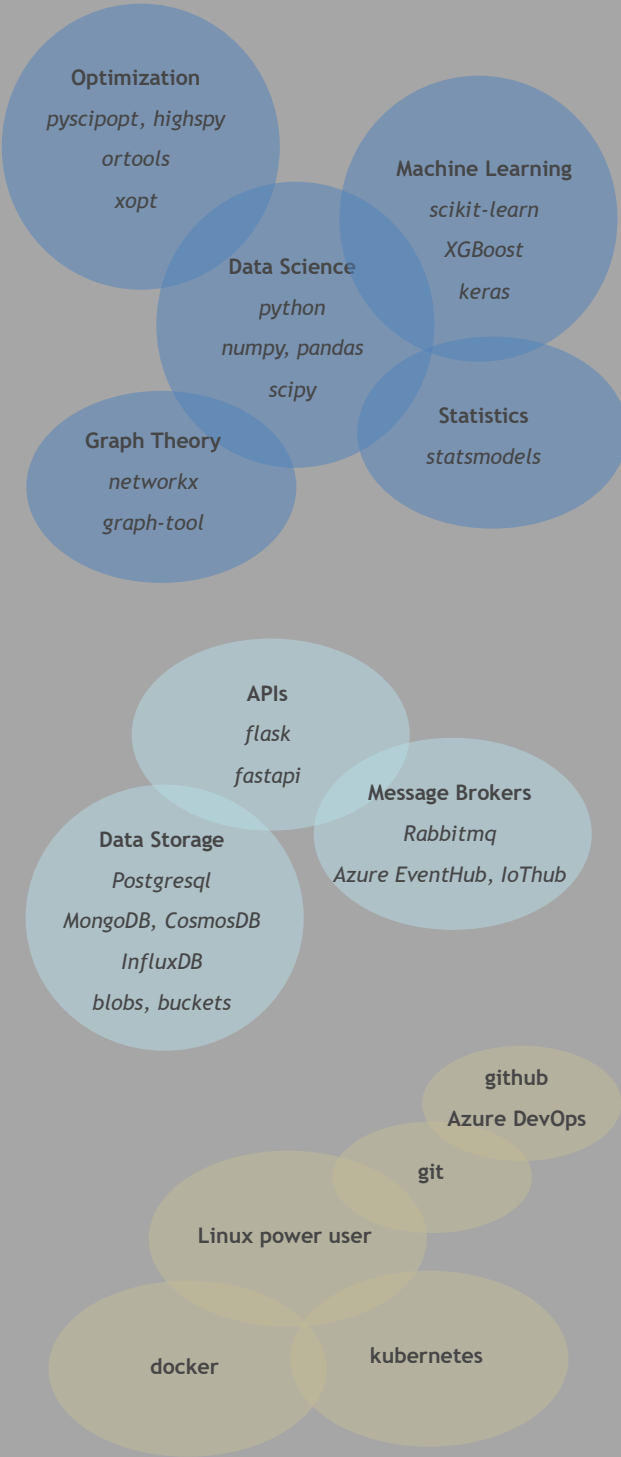
### PUBLICATIONS

J.Lata, I.Eguidazu et al. "Commissioning and Operation of Commercial Surrounding Heliostat Fields for Maximum but Safe production" Granada Solar Paces, 2011

I.Arregui, I.Eguidazu et al. "Flip Mirror Device for SENTINEL-3 SLSTR" 16th European Space Mechanisms and Tribology Symposium, ESMATS 2015

F. Muñoz, I.Eguidazu et al. "Advanced Structural Monitoring and Predictive Maintenance for Railway Bridges Using Distributed Fiber-Optic Sensors" 13th International Conference on Structural Health Monitoring of Intelligent Infrastructure, SHMII 2025

### SKILLS & KNOWLEDGE



### LANGUAGES

Spanish	★★★★★
English	★★★★☆
Basque	★★★☆☆