LUCAS MARTÍNEZ

Robotics Engineer

Email: lucas.m02r@gmail.com

Phone number: 601 30 95 21

www.linkedin.com/in/lucas-martínez-rodríguez

PROFILE SUMMARY

Robotics Engineer with solid experience in the end-to-end machine learning project lifecycle, from data extraction and analysis through to production deployment. Additionally, I design and develop user interfaces for model application and management in production environments. I seek to continue contributing solutions that innovate and optimize industrial processes, delivering efficiency improvements and cost reductions.

WORK EXPERIENCE

Machine Learning Engineer Intern, Eiffage Energía Sistemas | February 2025 – Present

End-to-end development and implementation of a defect detection model for photovoltaic modules:

- Pipeline design for data extraction and processing.
- Iterative hyperparameter and dataset tuning based on performance metrics.
- Production deployment with an operator-friendly user interface.

Model development for generating masks on photovoltaic plants.

- Data extraction and generation from georeferenced panel layers and satellite imagery.
- Training of a custom neural network from scratch using binary masks and satellite images.

Ingeniero en Prácticas, Eiffage Energía Sistemas | 2024 (junio) - 2024 (septiembre)

Designed and developed an intuitive interface for generating drone route plans over photovoltaic plants, featuring simple tools tailored to operators. Implemented an automated PowerShell installer that clones the repository, sets up and configures the runtime environment on any Windows machine, and includes an interactive menu for deploying the interface.

EDUCATION

Bachelor's Degree in Robotics Engineering, Universidad de Alicante | 2020-2025

Drone Pilot License (Open Category)

KEY SKILLS

Python | C | C++ | MATLAB | TensorFlow | PyTorch | Scikit-Learn | Streamlit | PowerShell | GitHub

LANGUAGES

- Spanish: Native

- English: B2