Andreu Gimenez Bolinches

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Still trying to save the world?

I want to invest my time in projects that can make a better place to live for the current and future generations. Either by seeking more efficient and sustainable solutions to actual problems or by developing technologies that intend to restore the damage we cause to the environment. I am a fast learner. Many of my programming skills are self-taught. That gives me an edge in time-limited problems like hackathons and sprints. I am a team player. Neither handball, business, nor competitions can be won alone.

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As a **robotics and aerospace engineer**, I have developed a broad range of technical skills that span from programming in multiple languages to advanced design and simulation software expertise. I have experience using the right tool for the job. Combining C++ for performance critical software that interacts with mature libraries together with Golang for a fast-paced backend development.

My public hobby projects include a Telegram controlled Spotify connected alarm clock in a Raspberry Pi developed in Python and a personal website using React. My academic publications include a C++ library for audio processing accessible as a Python extension used to train a Machine Learning model that estimates motion using audio sensors: Acoustic Odometry for Wheeled Robots on Loose Sandy Terrain DOI 10.1109/RoMoCo60539.2024.10604336.

I value my own developer experience and I put a strong emphasis on setting up maintainable projects where it is satisfying to work. I prepare Continuous Integration and Continuous Delivery workflows with GitHub Actions and Jenkins to automate operational tasks like building binaries or deploying the built application.

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M.Sc.Eng. Advanced Robotics

Keio University   2021 - 2022
- Concurrent Computing in Robotics
- Thesis: Acoustic Odometry

M.Eng. Automatics and Robotics

Warsaw University of Technology   2020 - 2021
- Human-robot interaction, haptic and collaborative robots

B.Eng. Aerospace Engineering

Universitat Politècnica de Valencia   2015 - 2019
- Hackathon Castellon 2017: AI-Machine Learning challenge winner and most popular project
- EOGU: James Dyson Award national finalist; Climate Launchpad national winner; StartUPV winner in the Advanced Idea section

Embry-Riddle Aeronautical University   Exchange 2018
- Involved in the AUVSI SUAS competition with the robotics student association

Hogeschool van Amsterdam   Exchange 2019
- Thesis: Design, Build & Fly an Unmanned Aerial Vehicle that is capable of flying a predetermined route and drop a small payload

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- Spanish (Native)
- Catalan (Native)
- English (Fluent, TOEFL 99 IBT)

References on request.

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Dotphoton

Software Engineer   2 years
October 2022 - Present
- Lead engineer for Jetraw a multi-storage data management platform with 8x image compression
- Architecture and full stack implementation
- Multiple languages (C++, Go, TypeScript, Python) with different interoperability solutions (REST API, C shared libraries, Node Addon)

ProntoPro

Marketing Automation Specialist   Part-time   7 months
October 2020 - April 2021
- Integrate different marketing tools with an in-house database using sqlalchemy and pandas
- Automated testing using pytest and Gitlab's CI/CD
- Projects manager and lead of a small team of junior engineers

Marketing Automation Engineer   11 months
November 2019 - September 2021
- MySQL database development and data scrapping
- Full stack web development with Django and React
- Junction Hackathon 2019: Winner of the Effective Radiation Therapy Plan Review challenge

Stadler Rail Valencia

Software Engineer   Part-time   6 months
September 2018 - Feb 2019
- Matlab Software development with GUI
- Predictive Maintenance