Ariel Escobar Capilla

Seville, Spain • arielescobarcapilla@gmail.com

arielec-dev.vercel.app • github.com/ArielEC • linkedin.com/in/ariel-escobar-capilla-3512a4393

Software Engineering graduate with hands-on experience developing end-to-end applications and data-driven systems. Passionate about solving complex problems by combining software engineering, artificial intelligence, and cloud technologies.

Education

University of Seville — Seville, Spain
Bachelor of Science in Computer Engineering - Software Engineering | Grade: 7.51/10 — Sep 2022 – Jul 2026

- Relevant Coursework: Data Structures, Algorithms, Software Architecture, Distributed Systems, Artificial Intelligence, Statistics.

Sciences Baccalaureate Top Honors (Top 5%) | Grade: 9.61/10 — May 2022

Experience

Zicofy Software S.L. — Seville, Spain
Full-Stack Developer Intern — Jan 2026 – Feb 2026

- Engineered "EmpatIA", an AI-driven empathetic chatbot platform designed to provide emotional support for students, working in direct collaboration with University of Seville researchers.
- Developed end-to-end full-stack capabilities such as dynamic user questionnaires, real-time audio transcription or conversational AI, and integrated data collection/feedback loops to capture user sentiment and evaluate AI efficacy.

Selected Projects

Pitch Rivals - ETL, Machine Learning and Web Development Applied to Fantasy Leagues | Bachelor's Thesis | Grade: 9.4/10

- Developed a gamified multiplayer football scouting platform based on probabilistic player performance predictions.
- Designed and implemented ETL pipelines, XGBoost-based machine learning models, an AI-driven opponent, and risk-adjusted drafting and shorting mechanics, integrating them into a competitive web-based football prediction game.

AI Automated Planning Solver for Lightsout

- Architected an AI-driven automated planning solver for the Lightsout puzzle, modeling complex state spaces and domains using PDDL and the Unified Planning framework.
- Engineered a custom Breadth-First Search (BFS) algorithm enhanced with a greedy heuristic, significantly outperforming the standard Fast Downward planner.
- Conducted performance benchmarking, proving the algorithm's capability to reduce solution length by nearly 70% while maintaining sub-second execution times.

Vecinus - Smart Property Management SaaS

- Developed a comprehensive property management cross-platform application for administrators and residents.
- Implemented advanced AI features, including automated meeting minutes transcription and an intelligent RAG chatbot for incident management and property rules queries.
- Designed a scalable architecture to handle complex business logic such as accounting, facility reservations, and secure role-based access.

Skills & Interests

Programming Languages: Python, Java, JavaScript/TypeScript, SQL, R, PDDL.
Cloud & DevOps: Docker, Vagrant, Google Cloud Platform (GCP), Render, Vercel, Supabase, Neon, Git, GitHub Actions.
Databases & Architecture: PostgreSQL, SQLite, MariaDB, MongoDB, Firestore, REST APIs, GraphQL.
Frameworks: XGBoost, Optuna, React, ReactNative, Node.js, Express.js, Django, FastAPI, Spring Boot, Unified Planning, Pytest, JUnit.
Spoken Languages: Spanish (Native), English (B2 Cambridge).
Interests: AI, Agentic Systems, Intelligent Automation, Cloud Systems and Data Science. Videogames and personal development.