

Alonso Rapado

Mid - Senior Software Engineer

Copenhagen, Denmark - Madrid, Spain



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Backend Software Engineer with 5+ years of experience building reliable applications and APIs. I have worked across different scales; from early-stage prototypes to enterprise AI solutions. I am comfortable with full-stack development and I collaborate well with Frontend teams when projects require it. While my main focus is backend and full-stack work, I'm also comfortable deploying and maintaining apps in the cloud. Currently splitting time between Madrid and Copenhagen, focused on creating software that makes a real difference.

Experience

Senior Software Engineer

NTT Data Business Solutions

Nov. 2024 – Present

Copenhagen, Denmark

- Developed and deployed a **Generative AI solution** for Børns Vilkår using **FastAPI**, **MongoDB**, and **Azure OpenAI**, reducing processing time from hours to minutes and optimizing efficiency. Performed hands-on **model evaluation** and **prompt tuning**.
- Built and maintained a **validation API with AI support** using **Python**, **Terraform**, and **IBM WatsonX**, enhancing data reliability and automation across **SAP** systems.
- Contributed to **Angular frontend development** for the **ROCCAI** platform, collaborating on UI architecture design and ensuring integration with backend services.
- Enhanced React-based **Warehouse Optimizer project** using **TypeScript**, **Drizzle ORM**, and **Effect framework**, improving functionality and system performance.

Software Engineer

MOTOROLASOLUTIONS

Sep. 2023 – Nov. 2024

Copenhagen, Denmark

- Developed robust **microservices using Elixir** with fault-tolerant design principles to improve system scalability and reliability in critical communications infrastructure.
- Built and maintained **Spring Boot REST APIs** for microservices architecture, ensuring high availability for mission-critical communication systems.
- Implemented and integrated **message brokers** including **NATS**, **RabbitMQ**, **Kafka**, and **Azure EventHubs** for event-driven communication.
- Conducted **unit testing with JUnit and ExUnit**, plus integration testing using **PACT contracts** and **TILT** to ensure code quality and system reliability.
- Managed containerization and orchestration using **Docker and Kubernetes** with Infrastructure as Code principles for automated deployment pipelines.

Part time Software Engineer

MOTOROLASOLUTIONS

Jun. 2022 – Sep. 2023

Copenhagen, Denmark

- Maintained and optimized **Jenkins CI/CD pipelines**, VM environments, and physical servers to ensure consistent system performance and reliability.
- Implemented **automated UI and unit testing** frameworks using **Selenium and RobotFramework** with Python, reducing manual testing overhead.
- Led automation project focused on **optimizing power consumption** and computational balance in production servers, improving operational efficiency and resource utilization.

Junior Software Engineer

INDRA Sistemas

Jan. 2021 – Aug. 2021

Madrid, Spain

- Developed **Angular components** based on UX designs within a dashboard framework, implementing library-oriented architecture patterns for code reusability.
- Integrated client-side services with **Java Spring Boot backend** using **REST APIs**, ensuring reliable data flow and consistent user experience.
- Collaborated in **Agile development environment** with iterative delivery cycles, participating in sprint planning, daily standups, and retrospectives.
- Gained experience with **microservices architecture and Kubernetes** deployment, contributing to infrastructure design discussions.

Software Engineer Intern

TELEFONICA

Dec. 2019 – Dec.2020

Madrid, Spain

- Transformed conceptual requirements into working **prototypes using Python, TypeScript, and MongoDB**.
- Collaborated with **cross-functional teams** to align prototype development with user requirements and business objectives.
- Maintained and extended dashboard application features using **.NET, TypeScript, Azure, SQL Server**, and **Docker** containerization.
- Contributed to **project planning activities** including timeline estimation, technical analysis, and resource allocation for successful project delivery.

Programming and Robotics teacher

Multiple institutions

2017 – 2019

Madrid, Spain

- Designed and delivered **programming and robotics curricula** for students aged 8-18, introducing fundamental coding concepts using **Python and robotics**.
- Developed comprehensive lesson plans balancing theoretical concepts with **hands-on projects**, accommodating different learning styles and skill levels.
- Adapted instructional methods based on **student feedback**, creating supportive learning environments that encouraged technical exploration.

Education

MSc. in Autonomous Systems Engineering

Denmark Technical University

2021 – 2023

Lyngby, Denmark

BEng. in Software Engineering

U-TAD (Centro Universitario de Tecnología y Arte Digital)

2016 – 2020

Madrid, Spain

Technical Skills

Programming Languages: Java, Python, Elixir, TypeScript, JavaScript, C++

Frontend and Frameworks: React, Angular, Vue, HTML, CSS, Sass, Tailwind

Backend and Services: Spring, .NET, Node.js, Kafka, Flask, FastAPI

Cloud and DevOps: Azure, Kubernetes, Docker, Terraform, GitHub Actions, Jenkins, IBM Cloud, Linux

Databases and Tools: PostgreSQL, MongoDB, Postman

Languages

English - C1 Cambridge Advanced | 2021

Spanish - Native