

Alejo Torres

Software Engineer

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Semi-Senior Software Engineer with 4+ years delivering high-impact web applications. Expert in designing monolithic, event-driven and microservice systems (Node.js, Python backends; React.js, Angular frontends). Built and scaled distributed event-processing pipelines (Bull, n8n, NestJS) and automated Azure/GCP infrastructures via Terraform and DevOps pipelines. Mentor and collaborator, driving best practices in API design, code quality and team onboarding.

AREAS OF EXPERTISE

- Backend development
- Frontend development
- Event-driven systems
- Microservices
- Cloud Infrastructure
- Generative AI integration
- Technical leadership
- knowledge sharing
- Team collaboration

PROFESSIONAL EXPERIENCE

EmpatIA

FullStack Tech Leader

Madrid, Spain

August 2024–Currently

- Created full-stack solutions using React.js and NestJS, built on top of Azure App Services and AKS-based scalable infrastructure.
- Maintained and developed architecture diagrams and technical runbooks, which cut knowledge-transfer time by 30% and streamlined onboarding.
- Directed the development of a distributed event-scheduler with Bull queues, NestJS Workers, and Redis to provide reliable job orchestration at scale.
- Automated provisioning of the infrastructure using Azure Pipelines, reducing environment setup by 50%.

Altostratus Cloud Consulting

FullStack Developer

Madrid, Spain

April 2023–Dec. 2023

- Engineered distributed data-processing architectures in Python, improving the efficiency of pipeline deployment by 15%.
- Managed GCP resources (Cloud Functions, Pub/Sub) using Terraform, providing secure, cost-optimized cloud management.
- Emplaced end-to-end CI/CD on Azure DevOps and GitHub Actions, shortening build cycles by 25%.
- Developed responsive web UIs using React.js and Angular and integrated RESTful and GraphQL APIs to handle dynamic data interactions.

Silentium Apps
Trainee Developer

Salta, Argentina
August 2022–Dec. 2022

- Improved backend performance by 20% through refactoring using OOP principles on NestJS and .NET Core.
- Introduced NestJS modules and .NET libraries through thorough research, providing new features that improved UX scores by 15%.
- Partnered with lead engineers to incorporate Angular elements, enhancing usability.

Institute of Innovation and Applied Technology
Machine Learning Researcher

Salta, Argentina
March 2022–Aug. 2022

- Created a replicable ML testing environment with MLflow on GCE and improved model evaluation cycles by 20%.
- Created and optimized Deep Q-Learning models, which attained 95% accuracy in simulation tasks.
- Automated tracking of hyperparameters and experiment logging using MLflow, increasing model iteration speed by 25%.
- Created technical documents and tutorials using Jupyter, which facilitate team reproduction and minimize onboarding time.

Catholic University of Salta
Student Researcher

Salta, Argentina
August 2021–Dec. 2024

- Incorporated key features in the KeyWordFinder Electron/Vue.js application, increasing processing efficiency by 20%.
- Conducted and published research on data privacy/security in metaverses
- Presented the research paper "Protection, Security, and Privacy of Data in Metaverses" at the XII CIDDI 2022 and III JEI 2022 conferences.

EDUCATION

Catholic University of Salta
Computer Science Engineer, Cum Laude

Salta, Argentina
December 2024

- Academic Excellence Award on 2023
- Thesis Work: Text Synthesis Using Language Models

Polytechnical University of Madrid (UPM)
AI Engineer – SMILE scholarship

Madrid, Spain
Feb. 2023 - July 2023

- Cum laude in Microservices Architectures, Intelligent Systems, Machine Learning II

ADDITIONAL SKILLS

- Languages: Spanish: Native. English: Excellent level in Reading, Writing, and Fluent Speaking.
- Tech Stack: TypeScript, Node.js, NestJS, React.js, Next.js, Python (Pandas, TensorFlow, PyTorch), SQL, .NET, HTML5, CSS3, Docker, Kubernetes, Terraform, Azure, GCP.