

Alejandro Sánchez Yalí

Senior Full Stack Developer

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SUMMARY

I'm a senior full stack software developer with a background in mathematics and experience in both traditional software development and projects involving AI and blockchain, skilled in developing both frontend and backend solutions. I work on a variety of applications, including AI-driven models and decentralized solutions.

TECHNICAL SKILLS

- **Languages:** Python, JavaScript, TypeScript, Rust, C
- **Frameworks:** Django, FastAPI, Flask, React.js, Next.js, TensorFlow, PyTorch, JAX
- **Technologies:** AI/ML, Blockchain
- **Databases:** MongoDB, PostgreSQL
- **Cloud Platforms:** AWS, GCP
- **DevOps** GitHub Actions, Docker, Docker Compose

EXPERIENCE

Full-stack Developer

Monadical

Apr 2021 – Aug 2024

Remote Job - Canada/EEUU

- Developed full-stack applications using Django, React, and Python
- Contributed to blockchain solutions for NFT platforms and decentralized poker games
- Built AI tools for information retrieval using large language models (LLMs)

Professor

Universidad de Antioquia

Jan 2010 – Oct 2021

Medellín, Colombia

- Taught advanced courses in Machine Learning and Mathematics
- Mentored research projects in Category Theory and ML applications

Full-stack Developer

BCFort


Aug 2018 – Oct 2020

Medellín, Colombia

- Led development of blockchain solutions with Ethereum and Hyperledger
- Managed cloud infrastructure on AWS, GCP, and IBM Cloud

FEATURED PROJECTS

- **Digital Human - Interactive AI Avatar** [↗](#)
 - Engineered a conversational AI system integrating Open AI GPT, Whisper, and Eleven Labs for natural language processing and speech synthesis
 - Implemented real-time lip synchronization using Rhubarb Lip Sync, creating a seamless human-AI interaction experience

- [Zmodn - Advanced Modular Arithmetic Library](#) 
 - Developed a high-performance Python library for modular arithmetic using NumPy
 - Implemented matrix operations, modular inverses, and seamless NumPy integration for cryptography applications

EDUCATION

Master in Mathematics

Universidad de Antioquia

Sep 2013

Medellín, Colombia

B.Sc. in Teaching Mathematics and Physics

Universidad de Antioquia

Oct 2009

Medellín, Colombia

CERTIFICATIONS

- Applied Data Science with Python Specialization
- Solana Blockchain Developer Bootcamp with Rust + JavaScript
- Data Science: Transformers for Natural Language Processing