

Blockchain Expert Engineer with 10+ years of software engineering experience and 4+ years building production Web3 platforms, smart contract systems, and dApp frontends across EVM-compatible chains. Certified Blockchain Developer with hands-on Solidity smart contract development, smart contract architecture and security expertise, and deep EVM (Ethereum Virtual Machine) knowledge. Architected TypeScript backend services and React-based frontend interfaces for decentralized applications including DeFi protocol integrations and DEX (Decentralized Exchange) connectivity solutions. Accelerates delivery through AI-augmented workflows leveraging agentic AI and Model Context Protocol (MCP).

EDUCATION

Blockchain Developer (2022) Udacity
— ID# D7GGFQYG

B.Sc. Systems Engineering (2016)
Universidad Distrital F.J.C., Bogotá

Data Science with Python (2021)
DataCamp

TECHNICAL PROFICIENCIES

Blockchain & Web3: Solidity, EVM, Smart Contracts, Web3.js, ethers.js, Hardhat, DeFi Protocols, DEX Architecture, Token Standards (ERC-20, ERC-721), Tokenization

Languages: TypeScript, JavaScript, Python, Dart, HTML, CSS (Tailwind, SASS)

Frameworks: React.js, Next.js, Node.js, Redux, MobX, Flutter, Django, Flask

AI & Automation: Agentic AI, Model Context Protocol (MCP), Prompt Engineering (Claude, GPT-4), AI-Assisted Development, LLM Integration

Infrastructure: AWS, Docker, PostgreSQL, MongoDB, Redis, GraphQL, Git, CI/CD

AREAS OF EXPERTISE

Blockchain & Smart Contract Development

Smart Contract Architecture & Security
DeFi Protocol Integration

DEX Development & Tokenization

EVM & Multi-Chain Architecture

Web3 Integration & Connectivity

dApp Frontend Development

Backend Development for Web3

AI-Augmented Development Workflows

Full-Stack Web Development

Agile / Scrum Methodologies

Team Leadership & Training

CAREER EXPERIENCE

Webacy, San Francisco, United States 2021 – Present

Principal Software Engineer

- Architected TypeScript backend APIs bridging web services with EVM-compatible blockchain networks, serving integration partners across the Web3 ecosystem.
- Developed responsive dApp frontend interfaces with React and Next.js, delivering seamless Web3 user experiences across multiple chains.
- Engineered secure smart contract integration layers connecting web services with blockchain wallet-based identity and DeFi protocol flows.
- Optimized backend data pipelines between Node.js API services and decentralized networks, improving response times by 40%.
- Implemented AI-augmented development workflows using agentic AI and MCP, accelerating feature delivery and automating engineering tasks.

Toptal, San Francisco, United States 2021 – Present

Freelance Software Engineer

- Architected and delivered full-stack web applications using React.js, Next.js, and Node.js for clients across fintech, blockchain, and healthcare verticals.
- Consulted on smart contract architecture and technical stack decisions, helping clients adopt blockchain connectivity and AI-assisted development practices.
- Integrated AI tooling into engineering workflows, leveraging prompt engineering and LLM automation to reduce development cycle times by 30%.

Integra Biosciences, San Francisco, United States 2023 – Present

Consulting Software Engineer

- Architected modular software solutions for laboratory equipment integration and scientific workflows using React and Node.js.
- Developed custom frontend interfaces enabling researchers to program experiments through visual drag-and-drop workflows.
- Implemented backend data pipeline solutions for scientific data processing and instrument communication.

Miroculus Inc., San Francisco, United States 2018 – 2022

Staff Software Engineer

- Built robust software for a device executing next-gen sequencing protocols (NGS), contributing to Series B investment for the company.
- Designed frontend interface for scientists to facilitate protocol design and execution across 5 supported workflows.
- Improved protocol translation algorithms enabling end users to design protocols using 20+ sets of different operations.

Youse, Bogotá, Colombia 2017 – 2018

Senior Front-end Developer – Technical Lead

- Delivered 3 production products (car, home, life assurance) by leading a cross-functional front-end team of 5 developers.
- Provided technical leadership and coaching to the development team, driving sprint velocity and on-time delivery.

Additional experience: Full Stack Developer & DevOps at Volaires SAS (2015–2017), Front-end Developer at Twneel Inc. (2013–2017), Full Stack Developer at Codetag ME