Oleksiy S.

Full Stack Developer

Summary of Qualifications	I am a Full Stack Developer with 5 years of experience working on high-complexity, production-grade products, including AI SaaS platforms. I have been involved in building systems where architectural choices, performance, and reliability are critical, not optional. I work at the level of system structure and long-term maintainability, not just feature delivery. My experience includes designing backend services, developing full-stack application flows, integrating third-party and blockchain services, and supporting applications in production environments. I regularly work with existing systems that require architectural improvement, deep refactoring, and careful changes without breaking live functionality. I am used to operating in projects with real technical responsibility, collaborating closely with other engineers, and contributing to decisions that affect system stability and future scalability.

Skills

Programming Languages/Technologies

- JavaScript/TypeScript
- Python
- NodeJS
- HTML5 /CSS 3/LESS/Sass
- SQL

Developer Productivity AI Tools

- GitHub Copilot
- ChatGPT
- Claude / Claude Code
- Cursor AI

Data Formats & Protocols

- JSON / XML / YAML
- WebSockets / Socket.IO
- GraphQL
- REST APIs

Content Management

- Sanity CMS

RDBMS:

- PostgreSQL
- MySQL
- SQLite
- MS SQL Server

NoSQL:

- Redis
- MongoDB
- Firebase

Infrastructure & DevOps

- Docker / Docker compose
- Terraform

Backend Frameworks & Libraries

- Express / Fastify / NestJS
- Medusa.js
- FastAPI
- TypeORM / Prisma ORM
- SQLAlchemy / Alembic
- Web3

Frontend Frameworks & Libraries

- React / Next.js
- Redux / Redux Toolkit / Zustand
- RTK Query / React Query / Axios
- React Hook Form / Formik
- Joi / Yup / Zod
- Material UI / Ant Design / Bootstrap
- Tailwind CSS / Shadcn
- tRPC

Software Engineering Practices

- Software Architecture Design
- Design Patterns
- RESTful API Design
- Microservices Architecture
- Technical Documentation
- Architecture Reports / Proposals / SRS
- Test Driven Development (TDD)

- Kubernetes
- Nginx / Apache

Cloud Providers

- AWS (EC2, RDS, S3, CloudWatch, Lambda)
- GCP

CI/CD

- GitHub Actions
- GitHub CI/CD

Version Control

- Git / GitHub
- GitLab
- Bitbucket

Methodologies

- Agile / Scrum / Kanban
- Waterfall

Operating Systems

- Linux / Unix (Debian, Ubuntu, SUSE)
- macOS
- Windows

Web Scraping & Automation

- Cheerio
- Selenium
- BeatifulSoap
- Scrapy

- Feature Driven Development (FDD)
- Pair Programming

Testing Tools & Frameworks

- Jest / Vitest
- Pytest / Unittest / Mock
- React Testing Library
- Cypress / Playwright / Selenium
- CodeceptJS
- Storybook
- Mock Service Worker (MSW)
- Postman

Build Tools

- Vite
- Webpack
- Turbopack / SWC

Development Tools

- VS Code
- WebStorm
- Cursor
- PyCharm

Experience

Project Description:

Media Intelligence and Content Analysis Platform

Comprehensive data collection and analysis system that aggregates content from multiple online sources including YouTube, Reddit, and web articles. The platform enables users to organize content into projects, automate data gathering workflows, and generate detailed analytical reports. Features include advanced entity extraction, custom ontology-based analysis, real-time analytics dashboards with interactive visualizations, engagement metrics tracking, sentiment analysis, and content trend monitoring. Customizable workflows automate repetitive tasks while providing both high-level analytics and granular content-level insights to support market research, brand monitoring, and competitive intelligence.

Domains: Content Aggregation & Collection, Analytics & Intelligence

Involvement Duration: 1.5 years

Project Role: Full Stack Developer

Responsibilities:

- Architected and built the entire frontend from scratch using Next.js and React, implementing a scalable, maintainable architecture with clear separation of concerns and modular component design
- Established comprehensive testing infrastructure with extensive unit test coverage and end-to-end testing for core user workflows, ensuring application stability and reliability
- Drove significant performance improvements through systematic optimization: eliminated unnecessary re-renders using React memoization, optimized

component rendering lifecycles, and fine-tuned Webpack and Next.js configurations for faster builds and reduced bundle sizes
- Delivered critical technical recommendations on technology stack choices and architectural decisions that accelerated development velocity and enhanced performance, resulting in measurable cost savings
- Contributed to backend development using FastAPI, collaborating on API design and implementation to ensure seamless frontend-backend integration

Project Team Size: 4-8 team members

Tools & Technologies: Python, TypeScript, React, Next.js, Redux Toolkit, Socket.IO Client, Tailwind CSS, Radix UI, shadcn/ui, Framer Motion, AG Grid Enterprise, AG Charts Enterprise, Recharts, React Hook Form, Yup, Cypress, Jest, ESLint, Prettier, Husky, Sentry, NextAuth, RTK Query, Firebase, FastAPI, PostgreSQL, OpenAI, Google Cloud Platform

Digital Pathology Slide Viewer and Annotation Platform

Project Description: Web-based digital pathology system enabling pathologists and medical professionals to review, annotate, and collaborate on whole slide images (WSI). The platform provides advanced visualization using deep zoom technology for high-resolution medical slides with precise annotation tools, drawing capabilities, bounding boxes, and collaborative comments. Features include study management for organizing multiple slides, real-time collaboration through WebSocket connections, role-based access control, automated time tracking for review sessions, generation of surgical pathology statements and reports, comprehensive audit trails for regulatory compliance, and user activity monitoring. The platform streamlines digital pathology workflows with an intuitive interface for diagnostic review, quality assurance, and collaborative consultation.

Domains: Healthcare Technology, Digital Pathology, Medical Imaging

Involvement Duration: 1.5 year

Project Role: Full Stack Developer

Responsibilities:
- Led entire frontend development as Technical Lead, managing a team of 2 frontend developers and overseeing task distribution, code reviews, and sprint planning to ensure consistent delivery of high-quality features
- Architected robust and scalable frontend infrastructure using React 19, TypeScript, and Redux Toolkit, establishing clear architectural patterns, coding standards, and best practices that ensured maintainability and team productivity
- Designed and implemented the complete slide visualization and annotation system from scratch, building custom solutions on top of OpenSeadragon and Annotorious with extensive performance optimizations for handling high-resolution medical images and complex annotation workflows
- Engineered advanced annotation capabilities including custom drawing tools, polygon clipping algorithms (Martinez), collaborative real-time annotations via Socket.IO, and optimized rendering to handle hundreds of annotations simultaneously without degradation
- Drove continuous performance optimization: implemented virtualization for large datasets, optimized Redux state management, reduced unnecessary re-renders through React memoization, and fine-tuned bundle sizes for faster load times
- Contributed to backend development using FastAPI and Python, implementing REST API endpoints, WebSocket handlers for real-time collaboration, and database schema design with SQLAlchemy

Project Team Size: 5-8 team members

Tools & Technologies: Python, TypeScript, React 19, Vite, Redux Toolkit, RTK Query, Material UI, Socket.IO, OpenSeadragon, Annotorious, React Hook Form, Zod, FastAPI, SQLAlchemy, PostgreSQL, Redis, Docker, Google Cloud Platform

AI SAAS platform for natural language understanding

Project Description: Enterprise-grade AI platform providing comprehensive tools for analyzing conversational text including support tickets, survey responses, and product reviews. The system leverages containerized applications with GPU processing capabilities, deployed across multi-cloud infrastructure (AWS, GCP, Azure). The platform enables organizations to extract actionable insights from unstructured text data through advanced natural language processing, sentiment analysis, and automated categorization for business intelligence and customer experience optimization.

Domains: AI & Machine Learning, Natural Language Processing, Data Analytics

Involvement Duration: 1 year

Project Role: Full Stack Developer

Responsibilities:

- Architected and developed a full-featured standalone Survey Service from scratch using Next.js, creating an independent microservice with complete CRUD operations, form building capabilities, and response collection workflows
- Enhanced the main product's frontend by implementing new analytical features and data visualization capabilities, building interactive dashboards and reporting tools that transformed raw NLP data into actionable business insights
- Successfully led critical technical migration from React 16 to React 18, systematically updating dozens of legacy dependencies, replacing incompatible libraries, refactoring deprecated patterns, and updating the entire test suite to ensure seamless compatibility and improved performance
- Established comprehensive testing infrastructure including unit tests with Jest and component documentation through Storybook, improving code quality and developer experience
- Contributed to backend development using FastAPI and Python, implementing RESTful APIs, database schema design, and business logic to support frontend requirements

Project Team Size: 5-8 team members

Tools & Technologies: Python, TypeScript, React 16, React 18, Next.js, Redux Toolkit, RTK Query, Tailwind CSS, Material UI, Ant Design, FastAPI, PostgreSQL, SQLAlchemy, Jest, Storybook

Multi-Chain Cryptocurrency Wallet Application

Project Description: Non-custodial mobile cryptocurrency wallet providing secure multi-chain staking and DeFi access across multiple blockchain networks. The platform enables users to manage digital assets through an intuitive mobile interface with seamless send/receive transactions, staking rewards, validator delegation, and decentralized finance protocols. The application supports Ethereum, Polkadot, Cosmos, and other major chains, providing real-time portfolio tracking, transaction history, and yield optimization with robust backend infrastructure for blockchain indexing, transaction processing, and secure key management.

Domains: Cryptocurrency, Blockchain Technology, Decentralized Finance (DeFi)

Involvement Duration: 1 year

Project Role: Full Stack Developer

Responsibilities:

- Developed and maintained cross-platform mobile application using Ionic and React, delivering consistent user experience across iOS and Android platforms with native-like performance and offline capabilities
- Architected scalable backend microservices using Node.js with Fastify and Express frameworks, implementing high-performance APIs for blockchain interactions, transaction processing, and real-time data synchronization

	▪ Designed and implemented AWS infrastructure using Terraform for infrastructure-as-code, including EC2, RDS PostgreSQL, ElastiCache Redis, S3, and CloudWatch monitoring for production-grade reliability ▪ Optimized system architecture by introducing Redis caching strategies, database indexing, query optimization, and refactoring legacy code to improve response times and reduce infrastructure costs ▪ Established CI/CD pipelines for automated testing and deployment, ensuring consistent and reliable releases across multiple environments
Project Team Size:	10-12 team members
Tools & Technologies:	Node.js, TypeScript, React, Ionic, Express, Fastify, PostgreSQL, Redis, AWS (EC2, RDS, S3, CloudWatch), Terraform, Docker

Education	**Master's degree** Igor Sikorsky Kyiv Polytechnic National Technical University Avonics

Languages	**English**: Advanced
	Ukrainian: Native
	Russian: Native