

Alex Rosa

Bronx, NY 10473

alex.rosa629@gmail.com

+1 917 705 1406

Professional Summary

With a strong foundation in full-stack development, infrastructure optimization, and system architecture, I bring extensive experience in crafting scalable and high-performance applications. My expertise spans front-end frameworks like React.js and Angular, as well as backend technologies such as Node.js, Express.js, and Spring MVC. At Ticketmaster, I enhanced event ticketing systems through optimized component structures and efficient API integrations, while at IDEMIA, I built modular microservices for facial recognition leveraging Kafka and Kubernetes for scalable event-driven processing. I have hands-on experience with cloud technologies, including AWS (EC2, S3, Lambda), containerized deployments with Docker, and CI/CD automation using GitHub Actions and Jenkins. My background also includes OAuth2 authentication frameworks, JWT security implementations, and blockchain-based solutions like Sawtooth API development. Whether debugging complex infrastructures or refining real-time application performance, I am adept at leading technical initiatives that drive innovation, efficiency, and security in modern digital ecosystems.

Authorized to work in the US for any employer

Work Experience

Software Engineer

Ticketmaster-New York, NY

September 2024 to March 2025

- Developed and maintained high-traffic event ticketing interfaces using React.js and TypeScript, optimizing component structure for scalability and performance.
- Integrated RESTful APIs and GraphQL endpoints to dynamically display real-time event data, user accounts, and transaction histories.
- Enhanced state management with Redux and Context API to improve application responsiveness and reduce unnecessary re-renders.
- Collaborated closely with UI/UX designers to implement accessible and mobile-responsive designs, adhering to Web Content Accessibility Guidelines (WCAG).

Full-Stack & Infrastructure Contributions:

- Assisted backend developers in Node.js and Express.js, contributing to user authentication systems and secure payment processing.
- Designed and deployed Dockerized microservices, ensuring scalable and containerized environments for various ticketing and transaction modules.
- Worked with AWS (EC2, S3, Lambda) to support cloud-based solutions for serverless functions and media storage.
- Set up CI/CD pipelines with GitHub Actions and Jenkins, automating build processes and testing workflows for faster feature releases.
- Optimized SQL and NoSQL databases (PostgreSQL, MongoDB) for efficient ticket inventory management and fast query resolution.
- Monitored server health and resolved deployment issues using Nginx, PM2, and log tracking tools like Datadog.

Full Stack Developer

IDEMIA Identity & Security LLC-Anaheim, CA

April 2022 to September 2024

- Architected and optimized facial recognition system performance, collaborating across multiple time zones to integrate enhancements into production.
- Developed a modular microservice architecture to handle facial recognition requests asynchronously, improving system efficiency and allowing horizontal scaling based on demand. Implemented event-driven processing using Kafka to distribute tasks across multiple nodes, significantly reducing response times during peak loads.
- Designed and deployed containerized microservices using Kubernetes, streamlining CI/CD pipelines and optimizing resource allocation.
- Refactored legacy codebases to leverage modern asynchronous processing techniques, significantly reducing load times and enhancing user experience.

Full Stack Developer

ZenKey-New York, NY

March 2021 to March 2022

- Engineered a custom OAuth2 authentication framework for secure customer identity validation, ensuring compliance with industry standards.
- Developed a responsive customer portal using Angular and Node.js, integrating API endpoints for real-time data retrieval and verification.
- Orchestrated API integrations with three major wireless carriers, establishing secure pipelines for identity authentication.
- Automated CI/CD workflows with Jenkins, implementing robust testing frameworks to streamline deployment cycles.
- Led collaboration with QA engineers, designing comprehensive test cases for API endpoints and front-end components.
- Developed and maintained a Sawtooth Blockchain API, enabling efficient management of client-side JSON data for distributed ledger applications.

Lead Developer

Circle-Network-Bronx, NY

October 2020 to January 2021

- Designed and standardized API documentation using Swagger UI, automating interface contracts for seamless integration across microservices.
- Implemented JWT authentication with signed private keys managed via Java KeyStore, bolstering security measures for user identity verification.
- Utilized Lombok and MapStruct to streamline model-to-DTO mapping, reducing boilerplate code and improving maintainability.

Junior Developer

Revature-New York, NY

May 2020 to September 2020

- Migrated a legacy enterprise application to a modern Spring MVC architecture, integrating an Angular front-end framework for enhanced UX.
- Established automated testing pipelines using JUnit and Mockito, ensuring code stability and reducing regression errors across deployments.

Frontline Supervisor

UPS

November 2017 to May 2020

- Led a team of 10-20 employees to meet production goals
- Handled employee discipline and recognition
- Utilized proprietary analytic software to devise goals for increasing productivity

- Ran and debugged a mechanically automated sorting system

Junior Developer

ITC Management

May 2018 to June 2019

- Created employee login portal using java servlets
- Made company site responsive and mobile friendly
- Implemented OAuth login into company portal

Teaching Assistant

Borough of Manhattan CC

August 2016 to December 2016

- Explained and taught java concepts and protocols to a group of ~20
- Improvised lessons when professor was absent

LEADERSHIP

Projects

Myself

PROJECTS

Visual Sorter-Angular website that visualizes sorting algorithms using CSS keyframes and the Hostbinding angular library that allow for dynamic animations. Available on Github.

ZorkVoice- Created a protocol for a C and Java program to communicate and used the google SpeechRecognizer library to add voice input to the classic game. Made API calls to thesaurus.com to expand word input range. Available on Github.

BigIntCalculator- Created a calculator in C++ that is not limited by the specifications of Int or Long but is instead limited by system memory and uses overloaded operators to perform calculations. Available on Github.

Education

A.S in Computer Science

Borough of Manhattan Community College

January 2017

Skills

- aws
- Responsive web design
- Java
- Agile
- CSS
- Angular
- Maven
- C++
- JSON
- JavaScript

- HTML5
- Git
- AJAX
- SQL
- Bootstrap
- DevOps
- Node.js
- APIs
- Jira
- Hibernate
- Spring
- Tomcat
- Microservices
- REST
- Unit Testing
- User Interface (UI)
- Jenkins

Links

<https://github.com/AlexDotExe>

Additional Information

SKILLS

Languages: Java, x86Assembler, C, C++, Javascript, HTML, CSS, Oracle SQL, Typescript,

Libraries/Frameworks: JDBC, JSP, Servlets, SpringBoot/Maven, Hibernate, AWS, RDS

Technologies: Selenium, Junit, Mockito, Jasmine, AWS,