

# Joseph Nguyen - Software Engineer

jo.josephqn@gmail.com (Preferred contact)

(408) 834-6318

San Jose, California

Portfolio: <https://www.josephqn.com>

LinkedIn: <https://www.linkedin.com/in/josephqn>

GitHub: <https://github.com/josephqn>

Software Engineer with 4+ years of experience designing and scaling distributed backend systems, high-throughput data pipelines, and search infrastructure. Proven track record of reducing system latency, improving large-scale data processing efficiency, and architecting secure cross-service platforms in cloud environments. Strong focus on performance engineering, system design, and backend scalability.

## Work Experience

### Proofpoint

February 2022 – Present

#### Software Engineer II

Sunnyvale, CA

- Owned and optimized a high-throughput Apache Flink pipeline processing millions of events per day, improving data processing efficiency by 30% by eliminating redundant gRPC calls across distributed services.
- Designed and implemented a multi-source user search system using an Abstract Syntax Tree (AST) to query and unify results across large-scale, heterogeneous data sources serving millions of search requests.
- Built a multi-threaded OpenSearch query system using slicing to parallelize large-scale search workloads, significantly improving throughput and reducing query latency under high request volume.
- Architected and owned a cross-service authentication platform using a Java proxy service to standardize and secure access across multiple high-traffic services handling millions of API requests.
- Designed and deployed a custom AWS Lambda Authorizer enabling secure, scalable API access control across distributed services supporting production-scale traffic.
- Reduced API latency by 40% for high-traffic endpoints handling millions of requests by implementing Redis caching and optimizing critical request paths.
- Built and maintained scalable microservices using Spring Boot, gRPC, Protobufs, and event-driven architecture supporting large-scale distributed systems.
- Implemented CI/CD test automation using Java and Selenium, reducing production issue detection time to under 5 minutes post-deployment across multiple services.
- Improved system reliability by identifying and preventing production issues through enhanced monitoring, alerting, and testing workflows in a distributed production environment.

### Epic Systems

August 2020 – July 2021

#### Full Stack Software Developer

Madison, WI

- Resolved high-priority production bugs using TypeScript, C#, and Caché, improving system stability and user experience.
- Improved backend performance by optimizing database queries and introducing pagination, reducing load times from ~5 seconds to under 2 seconds.
- Led migration of a legacy VB feature to JavaScript, improving customer engagement and system maintainability.
- Built reusable React components to accelerate frontend development and improve consistency across applications.
- Refactored validation logic to clearly separate client-side and server-side responsibilities, improving security and maintainability.

### Nidaan Systems Inc

June 2019 – August 2019

#### Full Stack Software Developer

San Jose, CA

- Built full-stack features using React, Redux, Express, and MongoDB in an Agile development environment.
- Designed and implemented RESTful APIs and documented endpoints using Swagger for maintainability and clarity.
- Improved frontend performance by optimizing data structures and reducing unnecessary re-renders.
- Developed user profile image upload functionality and contributed to MongoDB data modeling and schema design.

## Skills and Technologies

### Technical Skills

- Languages: Java, TypeScript, JavaScript, Python, HTML, CSS, with strong focus on building scalable backend systems and distributed applications
- Infrastructure: AWS (API Gateway, Kinesis), RabbitMQ, Jenkins, with experience designing and maintaining cloud-native, event-driven architectures
- Backend & Distributed Systems: Spring Boot, Node.js, React, Apache Flink, Selenium, TestNG, applied in production-grade, high-throughput systems
- Software: Docker, IntelliJ, VSCode, with hands-on experience in CI/CD pipelines and containerized deployments
- Databases: MySQL, PostgreSQL, caching systems, SQLite, with emphasis on query optimization, performance tuning, and low-latency data access

## Education

### San Jose State University

August 2016 – May 2020

- Bachelor's Degree, Computer Science
- Summa Cum Laude, President's Scholar, and Dean's Scholar

Major GPA: 3.9