Rajvi Patel

(602) 577 - 4001 rajvipatelm22@gmail.com linkedin.com/in/rajvi-patel-m github.com/rajvi-patel-22

SUMMARY

Full-stack software engineer with hands-on experience in building scalable, high-performance applications across **Java and Python**, and modern front-end technologies (**JavaScript, TypeScript, HTML, CSS**). Skilled in designing and optimizing large-scale systems, analyzing complex datasets, and developing intuitive data visualizations.

EDUCATION

Master of Science, Computer Science **Jan 2024 – Dec 2025**
Arizona State University, Tempe, AZ *4.00/4.00*
Coursework: Foundation of Algorithms, Software Security, Engineering Blockchain Apps, Cloud Computing (AWS), Applied Cryptography.

Bachelor of Technology, Information and Communication Technology **Jul 2017 – May 2021**
Ahmedabad University, Ahmedabad, IN *3.25/4.00*
Coursework: Data Structures, Operating Systems, Database Management Systems, Object-Oriented Programming, Computer Networks.

TECHNICAL SKILLS

Fundamental Concepts:	Data Structures & Algorithms, Object-Oriented Programming, Software Development Lifecycle
Programming Languages:	Python, Java, Go, C++, C, JavaScript, TypeScript
Web & APIs:	FastAPI, Django, Flask, Spring Boot, React.js, React Native, Vue.js, REST, GraphQL
Databases:	SQL (PostgreSQL, MySQL, SQLite), NoSQL (MongoDB, Elasticsearch, Redis)
Systems & Cloud:	GCP, AWS, Kubernetes, Terraform, Jenkins, Kafka, Docker
Developer Tools:	VSCode, Bitbucket, Git, Jira, Confluence, Microsoft Excel, Microsoft PowerPoint
Certifications :	Elastic Certified Engineer

EXPERIENCE

Software Engineer | *Silverton Software, Phoenix, AZ* **Jun 2025 – Present**
- Engineered a fault-tolerant, offline-first app (**React Native + FastAPI**), ensuring 99.9% uptime under unstable network.
- Implemented **SQLite-based** caching and deduplication, cutting redundant API calls by 68%, improving system scalability.
- Designed **REST APIs** with JWT auth, RBAC, CORS, and rate limiting, reducing 95th-percentile latency by 40%.
- Streamlined retry mechanisms with exponential backoff that reduced retry spikes by 35%, enhancing system reliability.

Software Engineer | *Arizona State University, Tempe, AZ* **Feb 2024 – Present**
- Developed a **Java/Spring Boot** platform with Zotero integration and secure **REST APIs** for bibliographic data operations.
- Boosted API performance 30% by optimizing **Spring Data JPA/Hibernate** via query tuning, batching, and caching.
- Transitioned API integrations from **XML** to **JSON** endpoints, reducing response latency by 150 milliseconds per call.
- Streamlined **PostgreSQL** queries, reducing response times by 20% and improving overall system performance.

Software Engineer | *Crest Data Systems, Ahmedabad, IN* **Jun 2021 – Nov 2023**
- Led end-to-end development of a **Rapid7** threat intel integration, handling API data ingestion, data modeling, and alert automation; introduced custom detection rules later adopted across Elastic security products (2.5K+ downloads).
- Built a full-stack web application using **React** and **Flask** to migrate production data across observability and analytics platforms, leveraging the official Python Elasticsearch client to reduce human efforts by 60% and improve data reliability.
- Achieved 85% test coverage using **Selenium** and **PyTest**, accelerating regression cycles and strengthening QA workflows.
- Received award for developing an anomaly detection algorithm reducing false positives by 35% across 1M+ daily events.
- Automated deployments using **Docker**, cutting release cycles from 40 minutes to 7 minutes.

Software Engineer Intern | *Crest Data Systems, Ahmedabad, IN* **Jan 2021 – Jun 2021**
- Optimized internal portal with **React** and **Python** backend, improving performance by 60%.
- Collaborated with cross-functional teams (DevOps, QA, Product) to align development milestones with delivery goals.

PROJECTS

Elasticsearch Open-Source Contributor | *Elasticsearch, Kibana, JSON, Selenium, Visualizations*
- Debugged and resolved 50+ issues in Elasticsearch integrations by analyzing stack traces, reducing failure rates by 25%.
- Migrated TSVB visualizations to Lens across integrations, making dashboards 40% faster under high-volume data loads.
- Engineered automated dashboard testing with **Selenium**, reducing manual verification effort by 60%.
- Recognized as **Elastic Bronze Contributor (2024)** for impactful contributions and best practices in distributed systems.

Autoscaling System with Dynamic Queue Management | *Python, FastAPI, SQS, S3, EC2, CloudWatch, Lambda*
- Designed an autoscaling face-recognition system using **Python** and **FastAPI** handling up to 10,000+ requests per hour.
- Devised an autoscaler monitoring **SQS** queue length to dynamically scale instances for efficient processing.

Estimating the effect of climate change on sea level using ML | *Python, MATLAB, Scikit-learn, NumPy, Pandas, Matplotlib*
- Developed predictive models for sea level rise in San Francisco and global regions using **NOAA** and satellite datasets.
- Implemented and compared three regression algorithms achieving an R^2 score of 0.93 and reducing RMSE by 18%.