Shriyukta Ram

Software Development Engineer

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SUMMARY

Software Development Engineer with 3+ years of experience delivering scalable Python applications, APIs, and data processing systems. Skilled in FastAPI, Django REST Framework, PostgreSQL, AWS, Docker, and Kubernetes. Strong track record in building high-performance microservices, automating ETL workflows, and integrating machine learning for predictive analytics.

SKILLS

Methodologies: Agile, Scrum, Kanban, SDLC
Languages: Python, JavaScript (ES6+), TypeScript, HTML5, CSS3, SQL
AI/ML Frameworks: TensorFlow, PyTorch, Scikit-learn, Keras, Pandas, NumPy
Frontend Frameworks: React.js, Angular, Vue.js, Redux, Bootstrap, Tailwind CSS
Backend & Databases: Node.js, Django, Flask, FastAPI, MongoDB, PostgreSQL, MySQL
Cloud & DevOps: AWS (EC2, S3, Lambda), Azure, Docker, Kubernetes, CI/CD, Git
Tools & Methodologies: RESTful APIs, GraphQL, Agile/Scrum, Jira, Unit Testing (Jest, PyTest)
Other: Data Visualization (Matplotlib, Seaborn), NLP, Computer Vision, GitHub Actions
Operating Systems: Windows, Linux

EXPERIENCE

ServiceNow, TX | Software Development Engineer **Nov 2024 – Current**

- Engineered highly scalable microservices in Python (FastAPI) for enterprise IT workflow automation, integrating PostgreSQL for transactional data storage and AWS Lambda for event-driven execution, resulting in a 30% reduction.
- Designed and implemented an automated log analytics pipeline using Python, Elasticsearch, and AWS S3 to process millions of log records daily, enabling real-time anomaly detection, proactive incident resolution.
- Developed and enforced a robust role-based access control (RBAC) system with OAuth2/JWT authentication to safeguard API endpoints, achieving full SOC 2 compliance and significantly improving the organization's security posture.
- Optimized asynchronous I/O operations in FastAPI services by restructuring API endpoints and query execution, which improved throughput by 40% for high-volume concurrent requests across distributed systems.
- Built, executed, and maintained comprehensive unit, integration, and regression test suites using PyTest, fully integrated into Jenkins CI/CD pipelines, which decreased post-deployment defects by 25% and enhanced release confidence.
- Led the migration of large monolithic Python codebases into Dockerized microservices orchestrated via Kubernetes, collaborating with DevOps teams to improve deployment efficiency, scalability, and maintainability across environments.

Virtual Infotech Solution, India | Software Developer **Aug 2021 - July 2023**

- Designed, developed, and deployed RESTful APIs using Django REST Framework to enable seamless data integration between a Customer Intelligence Platform, CRM systems, and advanced analytics dashboards, improving real-time data.
- Built large-scale, fault-tolerant data ingestion pipelines in Python using Pandas and SQL Alchemy to process millions of financial transaction records, achieving 99.5% processing accuracy and enabling faster downstream analytics.
- Developed predictive machine learning models with scikit-learn to identify at-risk customers and forecast retention probabilities, which enhanced campaign targeting strategies and increased retention rates by 18%.
- Created fully automated ETL workflows with Apache Airflow to handle data extraction, transformation, and reporting from multiple internal and third-party sources, reducing manual processing effort by 70% and ensuring consistent data quality.
- Integrated Redis caching mechanisms into frequently accessed API endpoints, reducing response times from 1.2 seconds to under 400 milliseconds, significantly enhancing user experience for high-frequency queries.
- Containerized critical services using Docker and deployed them to production environments on GCP Kubernetes Engine, achieving 99.5% uptime and streamlined rollback capabilities during rapid releases.

Virtual Infotech Solution, India | Junior Software Developer **Jun 2020 - April 2021**

- Developed Python-based backend automation modules for an internal business process optimization platform, integrating MySQL for secure, high-performance data storage, and delivering a 20% reduction in administrative processing time.
- Designed and implemented REST API endpoints using Flask to facilitate seamless, secure, and real-time data exchange between responsive web dashboards and backend services, improving operational efficiency for cross-functional teams.
- Authored custom Python scripts for advanced data validation, transformation, and error handling to ensure data integrity, which directly reduced processing errors and minimized data reconciliation overhead.
- Built and deployed containerized applications using Docker, collaborating closely with senior engineers to implement standardized CI/CD workflows that improved deployment speed, reliability, and version control.
- Actively participated in code reviews, debugging sessions, and unit testing with PyTest, which enhanced code maintainability, reduced technical debt, and ensured consistent coding standards across the development team.

EDUCATION

Master of Science in Computer Science **May 2025**
The University of Texas at Arlington **GPA: 3.8/4**
Bachelor of Engineering in Telecommunication Engineering **July 2021**
K.S. Institute of Technology **GPA: 8.9/10**