SHUBHAM NARKHEDE
Software Developer

📞 **(208)- 617- 6566**   ✉ **shubhamvnarkhede@gmail.com**   in **LinkedIn**   ⬡ **GitHub**   ⊙ **Portfolio**

Summary

Software Developer with 3+ years of experience crafting high-performance applications that serve millions of users. Proficient at optimizing system architectures to achieve efficiency gains. Expertise in full-stack development, microservices, and cloud-native solutions. Skilled in leading technical initiatives while maintaining exceptional code quality and test coverage.

Skills

Methodologies: SDLC, Agile, Waterfall
Programming Languages: Python (Pandas, NumPy), C, C++, SQL
Frontend Development: HTML5, CSS3, JavaScript, TypeScript, React, Redux, Bootstrap, Tailwind CSS, jQuery
Backend Development: Django, Node.js, Flask, REST APIs, FastAPI, SocketIO
Databases: MySQL, PostgreSQL, MongoDB
Cloud Platforms: AWS (EC2, S3), Azure (Azure SQL Database, Azure Functions), Google Cloud Platform (GCP)
Containerization and Virtualization: Docker, Kubernetes
Development Tools & IDEs: Visual Studio Code, IntelliJ, Eclipse
Testing Tools: Jest, Pytest, Postman
Version Control: Git, GitHub
Soft Skills: Problem-Solving, Communication Skills, Team Collaboration, Adaptability, Attention to detail

Education

Master of Science in Data Science | Stevens Institute of Technology, New Jersey   **May 2024**

Bachelor of Engineering in Electronics and Telecommunication | Mumbai University, India   **October 2020**

Work Experience

Software Developer | PNC, California   **January 2024 - Current**
- Engineered **RESTful APIs** using **Django** with **Redis** caching to efficiently handle high-volume financial transactions, while developing **React** and Redux frontends for real-time monitoring dashboards.
- Orchestrated microservices architecture migration using **Docker** and **Kubernetes**, implementing **FastAPI** services with **MongoDB** that reduced system response time by 40% and enhanced scalability.
- Architected and deployed scalable applications on **AWS** using ECS and **Lambda**, implementing automated deployment pipelines and integrating **S3** for secure file storage, reducing infrastructure costs and improved application reliability.
- Established a comprehensive testing framework using **Jest**, implementing automated CI/CD pipelines with **GitHub Actions** to enhance test coverage and reduce deployment issues.

Software Developer | Jio Platforms Ltd, India   **October 2020 - July 2022**
- Engineered the backend of JioWorks and scaled to handle **200K** concurrent users, designed microservices architecture leveraging **Node.js** and **MySQL**, while actively participating in **agile team activities** including story sizing, backlog grooming, and release planning.
- Optimized system performance by integrating **Redis** cache and **SocketIO** in APIs achieving faster response time, and improving database efficiency through **SQL** query optimization and index tuning resulting in 20% reduction in execution time.
- Implemented Global Search functionality using **Elasticsearch** cluster with optimized index-parameter tuning, achieving sub-second query response times while maintaining high throughput for concurrent users.

Software Developer | Vivma Software Inc, India   **November 2019 - October 2020**
- Developed RESTful APIs using **Python** and **Django** for an Employee Management System, implementing JWT authentication and role-based access control, resulting in 30% improved data access efficiency and comprehensive test coverage using **Pytest**.
- Collaborated in an **Agile** environment using **Git** for version control, participated in daily standups and code reviews while maintaining detailed technical documentation, ensuring code quality through consistent implementation of Python best practices.
- Designed and optimized **PostgreSQL** database schemas and implemented efficient data models using **Django**, incorporating **Redis** caching and using **Pandas** for data processing, reducing query response time by 40% and improving application performance under high user load.
- Developed responsive frontend interfaces using **React.js** with **TypeScript**, integrating with RESTful APIs and implementing real-time notifications using **SocketIO**, resulting in streamlined HR workflows with automated data validation.

Projects

AI-powered Healthcare RAG Chatbot, Winner: GMG-MAAI Hackathon, Stanford University: ⬈
Led a team to develop a healthcare chatbot using Retrieval-Augmented Generation (RAG) and advanced embeddings, the solution was deployed in Oracle Cloud, ensuring robust performance and scalability.

Notes App: Full-Stack Development with React and Django (React.js, Django, PostgreSQL, AWS): ⬈
Developed a full-stack Notes App with a React.js frontend and Django backend, using PostgreSQL for optimized data storage. Implemented secure RESTful APIs and Jest while providing a responsive user interface with React hooks.

Ensemble Machine Learning model for Intrusion Detection (Python, NSL-KDD, Sklearn, Numpy): ⬈
Developed an ensemble ML model for intrusion detection, leveraging CIC Flow Meter for real-time packet capture, batch training with scikit-learn, and cloud-based infrastructure for large-scale inference and network anomaly monitoring.

Predicting the Hotel booking Cancellation (Python, Juypter, Numpy, Pandas):
Developed a predictive model to forecast hotel booking cancellations using Python. Explored various algorithms, and identified Random Forest and Gradient Boosting as the most accurate. Conducted in-depth feature analysis to uncover customer cancellation factors.