RAKSHITH S

9741913621 | rakshiths2001official@gmail.com | LinkedIn | Github | Portfolio

SUMMARY

Results-oriented Software Engineer with expertise in C#, .NET Core, Angular, and AWS, specializing in scalable full-stack and cloud-native solutions. Skilled in designing secure data pipelines, RESTful APIs, and Docker-based deployments, with additional strengths in computer vision, machine learning, and high-performance computing. Adept at Agile collaboration and passionate about applying advanced technologies to deliver innovative, enterprise-grade healthcare applications.

EXPERIENCE

Siemens Healthineers   Bangalore, India
Software Engineer 1   *July 2023 – Present*

- **Owned end-to-end design & architecture** for components in a mission-critical medical imaging platform; translated product specs into **high-level** and **low-level** designs enabling reliable releases.
- **Applied algorithms & data structures** to optimize imaging workflows and concurrency in microservices; improved throughput and latency under real-world workloads.
- **Modeled data schemas** (PostgreSQL/MySQL) and designed class hierarchies using **OOP & design patterns**; reduced coupling and improved testability.
- **Developed RESTful services** and integration endpoints; standardized serialization and secure communication across Linux/Unix deployments.
- **Drove CI/CD** on Azure DevOps/AWS, reduced deployment cycles by 40%; introduced static analysis with **SonarQube** improving code quality metrics by 25%.
- **Led code reviews, design reviews, and architecture discussions**; mentored interns and collaborated cross-functionally in **Agile/SDLC** to deliver on-time.
- **Diagnosed performance bottlenecks** across compute/memory/I/O; implemented profiling-driven fixes to ensure high throughput and reliability.

Siemens Healthineers   Bangalore, India
Software Engineer Intern   *February 2023 – July 2023*

- Contributed to **scalable infrastructure** and backend modules; implemented **REST APIs**, data models, and unit/integration tests in an Agile environment.
- Automated developer workflows and CI tasks; participated in **code/design reviews**, improving maintainability and on-time delivery; achieved **60%** process time savings.

Beneath-a-Tree   India
Techno-Managerial STEM Internship   *February 2022 – March 2022*

- As a team of 4 STEM Trainers in Rural Gujarat for the STEM for Girls initiative, sparking interest in science and research. Planned events, communicated interculturally, and managed resources, logistics and execution.

SKILLS

Languages: Java, Go, C#, C/C++, Python, SQL, Bash, PowerShell, JS
Core CS: Algorithms, Data Structures, Object-Oriented Programming, Design Patterns, Low-level Design
Frameworks: Spring Boot, .NET Core, Angular
Databases: PostgreSQL, MySQL, MongoDB, Redis
Data Modeling: ER modeling, schema design, normalization, indexing strategies
Cloud/DevOps: Docker, Git, CI/CD, Azure/AWS, Kubernetes (basics), Linux/Unix
Testing: Playwright, Selenium, NUnit/xUnit, integration testing, contract testing
Practices: SDLC (Agile), code reviews, design reviews, architecture discussions
Libraries/Tools: IntelliJ IDEA, Visual Studio, Jupyter, NumPy, Pandas, OpenCV, scikit-learn

PROJECTS

Order-Matching-Engine ([Github](#)) │ *C++/C#, Docker, AWS*
- Implemented a high-performance trading engine with **algorithms & data structures** for order books and price matching; designed **multithreaded** execution with concurrency controls.
- Exposed **RESTful APIs**; containerized with Docker and deployed on AWS; followed **SDLC/Agile** and conducted **code reviews** for maintainability.

EchoLens – Code Analysis Tool ([Live](#) │ [Github](#)) │ *AI, ML, 3D Visualization*
- Built platform to predict risks, detect technical debt, and visualize dependencies; implemented semantic commit analysis and ML-based hotspot prediction.
- Designed service interfaces and data models; drove **architecture discussions** and **design reviews**; delivered dashboards to guide refactoring.

Med-Pilot ([Github](#)) │ *FastAPI, PostgreSQL, OpenAI*
- Developed backend services with **RESTful APIs** and **PostgreSQL** data modeling; deployed on Linux; implemented semantic search using embeddings.
- Integrated multi-agent modules; **optimized queries & indexing**; followed **Agile/SDLC**; ensured secure, scalable APIs and dashboards for clinical workflows.

Secure File Encryption Utility ([Github](#)) │ *Python, AES*
- Implemented encryption utility using **AES/CBC** with PKCS#7 padding; designed modular key management and robust error handling.
- Built CLI for usability; optimized performance for byte-level operations; adhered to **coding standards** and maintainable design.

Music Genre Classification ([Github](#)) │ *Python, Librosa, scikit-learn*
- Built ML pipeline for audio classification; implemented feature extraction and model training; achieved 67% accuracy with cross-validation.
- Created evaluation visualizations; documented **design decisions** and experiment results to guide improvements.

EDUCATION

National Institute of Engineering   Mysore, India
B.E in Electronics and Communication Engineering   *August 2019 – July 2023*
- Coursework: Computer Networks, Computer Architecture, DBMS, Big Data, Machine Learning, DSA, REST API.
- Language fluency: Kannada, English, Hindi.

CO-CURRICULARS

Xstasis Dance Group: Siemens Healthineers.
Project Head: UCSP Research Group, NIE.
Marketing & Design Head: Onyx E-Cell, NIE.