Pranaya Reddy

Austin, TX | Pranayareddy.nagilla96@gmail.com | LinkedIn | (945) 297-9465

Summary:
Results-driven **Senior Backend Engineer** with nearly 6 years of experience optimizing telecom and financial transaction systems, achieving a 25% improvement in system responsiveness. Strong expertise in **C++ and Python, SQL and relational databases**, and building scalable, low-latency applications in **Unix/Linux** environments. Proven ability to collaborate with cross-functional teams, document complex systems, and implement robust testing practices. Experienced with **CI/CD pipelines**, **containerization, Linux infrastructure**, and exposure to **Kubernetes** and **cloud platforms**.

Education:

Texas A&M University Kingsville   **Kingsville, TX**

Master of Science, Computer Science   Jan 2024-Dec 2025

Courses – Data Mining, Cyber Security, Cloud Computing, Compiler Design, Database Systems, Artificial Intelligence, Computer Architecture**.**

CVR College of College of Engineering   **Hyderabad, India**

Bachelor of Technology- Electrical and Electronics Engineering   Jan 2024-Dec 2025

Technical Skills:

- **Programming & Scripting:** C++, Python, Shell Scripting , Java, TypeScript, JavaScript
- Web Technologies : React.js, Node.js, REST APIs JSON, HTML, CSS
- **Backend & Systems:** Unix/Linux, multithreading, TCP/UDP socket programming
- **Databases:** Oracle, SQL Server (working knowledge – indexes, stored procedures, query optimization), PL/SQL, PostgreSQL
- **Tools & DevOps:** gdb, Valgrind, Eclipse, Visual C++,GitLab, GitHub, Jenkins, CI/CD pipelines, Docker, Ansible
- **Cloud Platforms:** AWS, Azure
- **Other:** Apache, Tomcat, JIRA, ServiceNow, Confluence, Agile, Scrum Methodologies

Professional Experience:

Tech Mahindra | leading global IT services company specializing in digital transformation

Senior Software Engineer

Client : MasterCard   **Sep 2022 – Dec 2023**
- Developed and maintained C++ backend applications for high-volume financial   transaction processing, ensuring performance, scalability, and reliability.
- Leveraged Python and Pro*C to implement automation and data-processing scripts for transaction validation, reconciliation, and reporting in real-time financial workflows.
- Automated build, test, and deployment pipelines using Jenkins and Git, enabling
- 25% faster release cycles, with exposure to containerized environments.
- Designed and optimized database schemas, indexes, and SQL queries for large transactional data stores, including Oracle and relational databases, reducing query latency by 15%.
- Conducted code reviews, system documentation, and unit testing, promoting collaboration, knowledge sharing, and 30% reduction in post-deployment defects.

Accenture | Global professional services company specializing in digital, cloud
Software   Engineer | C++ Developer
Client : AT&T   **Jan 2020 – Aug 2022**

- Refactored **legacy C++ backend systems** for modern platforms, improving scalability and
- **20% increase in throughput** for telecom services.
- Involved in the migration of legacy C++ backend systems from on-premises infrastructure to **Microsoft Azure**, modernizing deployment workflows and 20-25% improvement in deployment efficiency and system scalability.
- Developed and maintained **C++ modules** with **multithreading, asynchronous I/O, and TCP/UDP sockets**, optimizing high-concurrency network operations.
- Automated jobs using **Unix/Linux shell scripts** and supported **CI/CD pipelines**, improving operational efficiency and reducing manual intervention by **25%**.
- Utilized Veracode **static application security testing** to identify and remediate security **vulnerabilities** in C++ and Python backend systems, contributing to a 30% reduction in high and medium severity security findings.

Accenture - Associate Software Engineer
Client: CenturyLink   **Feb 2018 – Dec 2019**

- Developed and maintained C++ backend modules on Linux/Unix systems.
- Implemented object-oriented design and multithreading for networked applications, reducing latency in real-time communications.
- Debugged performance-critical issues using GDB and Valgrind, reducing memory leaks and crash rates by 20%
- Assisted in integration testing, production deployments, and legacy system refactoring.

Projects:

- Developed ChatEngine, a full-stack AI chat application using React, TypeScript, Python, and FastAPI with 8 microservices architecture.
- Implemented multi-model evaluation system querying 6 AI models concurrently via Groq API, achieving 3x faster response time through parallel processing.
- Built real- time WebSocket communication for streaming responses and designed PostgreSQL database schema supporting conversation history.