NAGARJUNA KOCHARLA

+1 (973) 975-8193 | arjunkocharla98@gmail.com | Charlotte, NC, USA | LinkedIn | Website

PROFESSIONAL SUMMARY

Software engineer with 4+ years of experience designing and building scalable enterprise systems. Skilled in **C#, Python, Java, Spring Boot, React, PostgreSQL**, and **Kafka**, with a focus on distributed microservices and **production reliability**.

PROFESSIONAL EXPERIENCE

CentrAlert   **Charlotte, NC, USA**
Software Engineer   *June 2023 - Present*
- Developed an emergency communication platform using C#, Python, React, SQL Server, Redis, and Kafka, powering real-time alerts for 100k+ users across 3k+ counties.
- Built and optimized distributed microservices and Kafka-based event pipelines, integrating Redis caching and asynchronous job processing to reduce message delivery latency.
- Deployed containerized services on Azure Kubernetes Service (AKS) with Docker, Terraform, and CI/CD pipelines, ensuring horizontal scalability and fault tolerance under peak load.
- Implemented observability using Elasticsearch, Prometheus, and custom logging in .NET, enabling faster incident detection and cutting MTTR by 30%.

CAMP Systems International   **Merrimack, NH, USA**
Software Engineer (Internship)   *May 2022 - August 2022*
- Developed MFA and OAuth 2.0 authentication workflows using C# with .NET, Identity Server, AWS, and PostgreSQL, reducing unauthorized access incidents by 30% and improving system compliance for aviation clients.
- Built React-based frontend modules integrated with REST APIs for compliance and reporting systems, improving user efficiency and audit accuracy by 25%.
- Automated end-to-end testing with Selenium, NUnit, and .NET, increasing release reliability and reducing manual regression effort by 40%.
- Deployed and maintained services on AWS EC2 and RDS, enhancing scalability and deployment speed by 30% through infrastructure optimizations.

Tata Consultancy Services (TCS)   **Hyderabad, Telangana, India**
Software Development Engineer   *July 2019 - July 2021*
- Developed enterprise backend applications using C# with .NET, Python, PostgreSQL, and Redis, delivering scalable and maintainable solutions across distributed systems.
- Built and optimized REST APIs and data processing pipelines in .NET, improving transaction throughput by 35% and streamlining high-volume batch operations.
- Refactored complex PostgreSQL queries and introduced indexing and Redis caching, reducing report generation time by 60% and improving API response performance across production dashboards.
- Automated infrastructure provisioning and deployment pipelines using Terraform, Docker, and Jenkins, enabling consistent environment replication and cutting release preparation time by 40%.

PROJECTS

Resume Helper AI Application - *Link to project*   **Remote**
                                                                                                                  2024 - 2025
- Built an AI automation platform with LangChain, OpenAI APIs, and embeddings, orchestrating backend workflows for document generation and semantic search.
- Deployed containerized services with Docker on Backblaze B2, enabling scalable file handling and automated Word/PDF outputs.
- Engineered vector search with embeddings, optimizing queries and cutting manual processing by 70%.

SKILLS

Programming & Frameworks: C#/.NET, Python, C++, Java, JavaScript (Node.js, TypeScript, React.js), Python web frameworks (Django, Flask), GraphQL

Databases & Messaging: SQL (SQL Server, PostgreSQL, MySQL), NoSQL (MongoDB, Cassandra, DynamoDB, Redis, Snowflake), Kafka, gRPC

Cloud & DevOps: Azure, AWS, GCP, Docker, Kubernetes, Terraform, Linux (Ubuntu), Jenkins, CI/CD

Tools & Practices: Git, Agile, REST APIs, microservices, Testing (integration, automated, E2E)

EDUCATION

M.S. Computer Science, University of Massachusetts at Lowell (2021 - 2023)
B.Tech. Electronics and Communications, Sreenidhi Institute of Science and Technology (2015 - 2019)