Ganesan Santhanam

(352) 871-3468 | ganesan.santhanam96@gmail.com | LinkedIn | Github | United States

My Impact & Expertise

- **Backend Engineering & Data Expertise**: Specialized in building scalable microservices, RESTful APIs, and optimizing relational/NoSQL databases with a strong focus on performance and efficiency.
- **Cloud & Modernization Leadership**: Successfully modernized legacy systems with cloud migrations and implemented cutting-edge architectures using .NET, Django, and NodeJS.

Professional Experience

Maxil Technology Solutions   May, 2024 — Present
Software Engineer   *Oak Brook, IL*
Product Description: Job Board for contract IT roles

- Designed a high-performance backend system for **clickstream analysis** on user interactions using **Node.js**, Celery, ReactJS, and MongoDB, improving visibility for job postings by 15%.
- Enhanced database efficiency for large-scale data queries by implementing **optimized indexing**, **ETL workflows**, and query result caching on **AWS DynamoDB and RDS**, reducing Time To First Byte (TTFB).

RedSail Technologies   Aug, 2023 — Apr, 2024
Full Stack Engineer   *Oak Brook, IL*
Product Description: Pharmacy Management Suite (Point Of Sale, Inventory, Medical Billing)

- Streamlined backend prescription compliance workflows by integrating **RESTful APIs** with **ASP.NET Core** and ensuring compatibility with **large-scale databases**.
- Improved claims processing efficiency by building **multi-threaded insurance claim systems** with **C# object pooling**, reducing reimbursement delays while ensuring compliance with HIPAA standards.
- Created **data integration pipelines** to deliver accurate drug information via **.NET WPF Forms**, integrating with SQL databases.
- Enhanced debugging and operational visibility with structured logging using **Serilog** and **correlation IDs**.

Autoreview.ai   May, 2022 – Dec, 2022
Software Engineer Intern, AI/ML   *Gainesville, FL*
Product Description: Document Manager for Construction Companies

- Built scalable **data ingestion pipelines** for real-time GIS analysis by leveraging **PostGIS** and **Google Maps APIs** for flood-risk identification.
- Engineered a **microservice architecture** using NLP techniques (**TensorFlow GloVe**) for **data embeddings**, stored in **Redis VectorDB**, achieving 92% accurate regulatory insights.
- Developed a license key lifecycle management system, incorporating **encryption techniques** with Django and MongoDB for subscription handling.

Infosys   Jul, 2018 – Jul, 2021
Software Engineer   *Chennai, India*
Product Description: Information System for Subsidized Housing

- Modernized backend modules for **property and contract management** using **WPF .NET Framework** and **OOAD principles** to improve maintainability.
- Designed and resolved complex data pipelines by creating **Power BI templates** and debugging 96 **SSRS reports**, enabling actionable insights from large-scale datasets.
- Spearheaded the **migration of databases** from Oracle/MS SQL to **Azure-hosted SQL Server**, leveraging cloud computing for enhanced scalability and performance.

Technical Skills

Backend & Databases:	Java, C#, Python, JavaScript (ES6+), SQL Server, Redis, Apache Kafka, BigQuery, Hive, HBase
Frameworks:	ASP.NET Core, MapReduce, ReactJS, ETL Tools, Node.js, Django, REST APIs, Tensorflow
Cloud and Tools:	AWS (S3, Lambda, RDS), Azure (VMs, Blob Storage), GitHub Actions, Tableau, Splunk, RabbitMQ, Git, Airflow
Soft Skills:	Product Feedback Integration, Design Patterns, Agile, Customer Centric, On-Call Support, Extreme Ownership, Experimentation, UX Principles, Database Design

Education

University of Florida   Aug, 2021 – May, 2023
Master's of Science in Computer Science   *Gainesville, Florida*