

Ganesan Santhanam

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SUMMARY

Experienced software developer and data management analyst with 4+ years' experience. Passionate about driving innovation and efficiency in diverse industries. Skilled in workflow optimization, feature development, and cutting-edge solution implementation. Committed to continuous learning and growth, with expertise in product development and algorithmic thinking.

EDUCATION

University Of Florida,	MS Computer Science	3.66/4	Aug 2021 – May 2023
SRM Institute of Science and Technology,	B. Tech Computer Science	8.844/10	Jul 2014 – May 2018

WORK EXPERIENCE

BestRx Pharmacy Software / .NET Developer / Full Time Aug 2023 – Apr 2024

- Developed the Insurance Claims Management module for our new medical billing system coordinating with the software architect, integrating thorough checks and real-time updates on claim status, enhancing efficiency by 60%, improving customer satisfaction and operational efficiency while reducing claim discrepancy resolution time.
- Refined mailing system using SendGrid with customizable messaging, promotions, and a dashboard for clients to monitor key metrics such as Open Rate, Click-Through Rate, Conversion Rate, and Unsubscribe Rate, integrated with reports, resulting in a 58% revenue increase for the pharmacies.

UF College of Nursing, UF / Data Management Analyst II / Full Time Jun 2023 – Aug 2023

- Architected an API leveraging an optimized database view of longitudinal dataset spanning five years, to generate insightful data visualizations and paginated table view of the datapoints enhancing the efficiency of research work by 300%.
- Implemented a real-time data collection feature leveraging Twilio's messaging and emailing capabilities to reduce missed interactions and enhance response rates, resulting in a substantial improvement of over 150%.

AutoReview.ai, UF Innovate / ML Engineer Intern, Web Developer Intern / Internship May 2022 – Dec 2022

- Designed an API to optimize document handling, boosting operational efficiency and client satisfaction. Integrated Google Vision API for text conversion, a custom R-CNN model for 24% faster image extraction, and GloVe NLP techniques for a 94% increase in keyword extraction accuracy, ensuring full regulatory compliance.
- Contributed to building permit management software, resulting in a 35% revenue increase and 180% efficiency improvement. Deployed refined Docker images on AWS EKS for reliable performance supporting 15-20k concurrent connections per second, enhancing vital business operations.

M.E. Rinker, Sr. School of Construction Management, UF / Graduate Assistant / Part-Time Apr 2022 – May 2022

- Engineered robust APIs for streamlined payment processing and user-license management, catalyzing stakeholder engagement and customer acquisition. By harnessing the power of STRIPE as a payment gateway and leveraging CRUD APIs, that aids in increased revenue.

Infosys Ltd / C# Developer / Full-Time Jul 2018 – Jul 2021

- Collaborated with stakeholders to enhance the Anti Money Laundering (AML) system, aiming to improve architecture for automated testing and sanity checking, resulting in streamlined regulatory compliance for the development and maintenance of the product.
- Identified and addressed bottlenecks in the data processing pipeline, implementing multi-threading algorithms to parallelize tasks resulting a 40% reduction in processing time and a 15% increase in system throughput, enhancing performance for more efficient handling of large datasets for Victoria DHHS information system using ASP.NET, Oracle.
- Migrated 118+ SSRS to PowerBI reports and transferred data from SQL Server 2005 and Oracle to SQL Server 2017.

SKILLS

Programming Languages: C#, Python, TypeScript, Java, JavaScript. **Operating Systems:** Unix, Windows

Cloud Platforms: Azure, AWS, GCP. **Frameworks:** NodeJS, ReactJS, .NET, Spring MVC.

Databases: SQL Server, PostgreSQL, MongoDB, Oracle. **DevOps and Tools:** Docker, GitHub, Mercurial

APIs, and Services: Stripe, PowerBI, Twilio, SendGrid.

PROJECTS

- **Simple Reddit, Jan 2022 – Apr 2022:** Optimized API by implementing periodic rating functions for user profiles, posts, and comments, reducing MongoDB database polling. Enhanced image and file handler utilizing better image compression, resulting in a 2x improvement in API response time.
- **Super Resolution, Jan 2022 – Apr 2022:** Authored a robust metric, perceptual acceptance score to evaluate SRGAN, SRCNN, and ESPCN models using a custom loss function and uniform architecture, trained over 20-100 epochs on a 5K dataset. Integrated a preprocessing layer to improve model validity, reducing errors and increasing accuracy by analyzing programmable and non-programmable factors.
- **Cache Simulator, Jan 2022 – Apr 2022:** Created a cache system simulator analyzing performance of LFU, LRU, and LPSU policies varying the parameters such as file size(10-1000MB), user traffic(10-60K), bandwidth, and cache space. The simulator collected data and enabled users to access simulation snapshots via custom command-line queries showing 12% in efficient cache handling.
- **Compiler, Aug – Dec 2021:** Constructed grammar rules that follow prominent OOPS-based statically typical language, built a compiler from scratch that analyses, and generates byte code, retaining productivity and performance to nearly 85-93% with O (N³) parser.
- **Accident Avoidance, Jan – May 2018:** Architected a CNN-LSTM based computer vision model with 99% accuracy for entity recognition, incorporated Raspberry PI for real-time notifications to alert drivers of proximal pedestrians, utilizing OpenCV, Neural Network, and embedded C programming.