SURENJANATH SINGH

Data Solutions Engineer & Systems Architect

(868) 263-9980 | surenjanath.singh@gmail.com

PROFESSIONAL SUMMARY

A highly driven, **self-taught** Systems Architect who doesn't just solve problems - I build the permanent, automated solutions that make them disappear. I combine a formal education in **Actuarial Science** with a passion for engineering to transform complex business problems into scalable, production-grade systems. My expertise lies in identifying operational inefficiencies and independently architecting and deploying the full-stack applications and data pipelines needed to create lasting value.

EDUCATION

2016 - 2021 University of West Indies, St Augustine

BSc special Actuarial Science

2014 - 2016 Presentation College, San Fernando (CAPE)

Natural Sciences

WORK EXPERIENCE

2023 - Pres. Gulf Insurance Limited

Project Officer

- Architected and engineered a comprehensive automation system for generating complex Central Bank of Trinidad and Tobago (CBTT) quarterly regulatory reports. The system processes and integrates data from multiple sources including trial balances, claims schedules, and stock valuations across 15 territories to automatically populate various reporting templates.
- Built the 'GEM Automation Code,' a complete insurance policy management and statement generation system using Python and Django, featuring a core automation engine, a web portal with a RESTful API, and an auto-update feature that reverse-engineered a legacy system.
- Independently engineered a full-stack Marine Insurance Underwriting Portal to replace a manual workflow, providing real-time analytics and dramatically enhancing operational efficiency.
- Designed and deployed a Bank Reconciliation Portal featuring an advanced matching algorithm to automate transaction reconciliation, significantly improving financial accuracy.
- Automated a wide range of critical business reports, including Actuarial, Lapse, and Maturity reports, providing key insights to management and eliminating hours of manual work. insurance policy management and statement generation system using Python and Django.

2021 - 2023 Gulf Insurance Limited

Project Assistant

- Directed and developed pension management portal, also manages policy updates, and reinstatements
- Optimized payment processes through Airslate documentation workflows
- Rectified 3,000 policies with precision calculation
- Engineered webforms to facilitate CSR in customer request management
- Developed dashboards for Death claims, Tablet entries, and automated statement generation
- Automated a range of reports, including Actuarial Report, Lapse Report, Maturity Reports,

2015 – 2015 Ministry of Works and Infrastructure

Clerical Assistant

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EXTRACURRICULAR INVOLVEMENT

2018/9: [University of West Indies, St Augustine]

- Public Relation Officer, Actuarial Science Club.
- Co-curricular courses: "Mind the Gap: Towards Psychological Health & Wellness," "Financial Literacy and Training."

2015/6: [Presentation College, San Fernando]

- President, Inventors Club.
- Top 10 in TT Math Olympiad, Round 3.

PROJECTS

Price Tracker Pricesmart (Link)

- Architected a production-grade, fully automated data pipeline using GitHub Actions that scrapes daily data, updates a persistent SQL database, and commits a live analysis report with zero manual intervention.
- Made a senior-level architectural decision to use a robust SQL database over a simple CSV to ensure scalability, data integrity, and query performance.

Trinidad Stock Exchange Market Analysis (Link)

- Engineered an automated data pipeline using Python, Requests, and Pandas to scrape, process, and compile a comprehensive historical dataset for 61 securities from the Trinidad Stock Exchange.
- The system runs daily to autonomously collect and update historical data, creating a valuable and always-current resource for market analysis.

Maritime Ports Database Builder (Link)

- Designed and built a custom relational database from scratch using Python, SQLAlchemy, and SQLite to store and manage ethically scraped maritime data.
- The project demonstrates proficiency in database architecture, schema design, and data modeling, resulting in a valuable, structured resource for logistics insights.

SOCIAL NETWORK

- LinkedIn https://www.linkedin.com/in/surenjanath

GitHub https://github.com/surenjanathMedium https://surenjanath.medium.com

ARCHITECTURAL PRINCIPLES

Initiative-Driven:

I identify problems and build solutions without waiting for instruction.

First-Principles Thinking:

I break down complex problems to their core components to build robust, logical systems.

Continuous Learning:

My skills are self-taught, reflecting a deep passion for mastering new technologies to solve real-world challenges.

CORE COMPETENCIES

Languages & Databases

- Python, SQL, R, Matlab

Data Engineering

 ETL Pipelines, Automation (n8n, Python), Database Architecture, Web Scraping, CI/CD (GitHub Actions)

Web & Application Development

 Django, Flask, HTML/CSS, Docker, Vercel Deployment

Analysis & Visualization

- Pandas, Matplotlib, Power BI, Tableau