

EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE
Masters of Science in Business Analytics

SINGAPORE
Jul 2024 - Sep 2025

PEC UNIVERSITY OF TECHNOLOGY
Bachelors of Technology in Electrical Engineering

INDIA
Aug 2017 - Jun 2021

- Awarded Institute Color; Certificate of Excellence; Certificate of Appreciation

EXPERIENCE

ZURICH INSURANCE (Data Science Intern)

Feb 2025 - Sep 2025, Singapore

- Designed an insurance dashboard using **Power BI** and **Python** with **Medallion architecture** to offer actionable insights on risk, hazard grade, and adequacy, helping reduce risk exposure by **35%** and accelerate decision-making by **60%** through ETL Processes and applying Econometric Modelling and statistical analysis, improve transparency across underwriting and risk management functions
- Automated end-to-end reporting and process automation for insurance data using **Python** and **Medallion architecture**, building Microsoft **Azure** pipelines and workflows with robust Data modelling to cut manual workload by **70%**, improve data accuracy by **30%**, and reduce report delivery time by **50%**, enabling real-time monitoring and analytics
- Led end-to-end delivery of insurance dashboard by driving requirements gathering, configuration and development, SIT and UAT coordination, user training, go-live support, and ongoing application support, ensuring high adoption and seamless transition to production

EXL SERVICE (Consultant)

Jan 2023 - Jul 2024, India

- Executed monthly targeted marketing plans using **Excel**, **Python**, **SQL**, **Snowflake** and **Tableau** resulting in a **40%** improvement in buyer outreach and improving user satisfaction including Performance Monitoring of pricing strategies, and leveraging data visualisation techniques
- Executed a 4-step direct mail marketing process using **Python**, **Tableau**, **SQL**, **Snowflake** and **Excel** to score key metrics, suppress redundant data, and design a detailed strategy including offers for multiple communication modes, improving targeted precision and efficiency
- Conducted ad-hoc analysis in each process cycle using **Python**, **SQL**, **Snowflake**, **Tableau** and **Excel**, adapting to real-time factors for optimal strategy refinement, cutting down process completion time by **40%** and transitioning to a single-handed operation
- Implemented clustering algorithms for customer segmentation, delivering dedicated Go-Live Support to marketing teams, which drove a **20%** increase in campaign conversion rates and improved overall customer engagement

EXL SERVICE (Business Analyst)

Jul 2021 - Dec 2022, India

- Led ETL processes and automation from **SAS** to **Python**, **Snowflake**, **SQL**, **Tableau**, **Databricks** of **20+** insurance dashboards and reports enhancing efficiency by **80%**, reducing manual intervention and processing time by **50%**, improving scalability and efficiency
- Recognised with the **EXL Client Recognition Award** for outstanding contribution and successful delivery of the Data Migration Project

ZENATIX SOLUTIONS (Business Analyst Intern)

Jan 2020 - May 2020, India

- Developed and optimised real-time sales data pipelines using **Python** and **SQL**, enabling lead scoring, sales forecasting, and up to **25%** increase in conversion rates through advanced SQL querying techniques, and financial modelling and solution development
- Automated analytics workflows & integrated application support to cut operational time by **60%** and boost efficiency speed **4x**, improving client uptime

RESEARCH PROJECTS

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- Facilitated research on AI Shock through **A/B testing** of ChatGPT outage data, developing treatment and control frameworks to measure user and performance outcomes, and implementing A/B testing methodologies and data collection

ACADEMIC PROJECTS

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- Spearheaded development of SamurAI, a **GenAI chatbot** for dementia care, improving cognitive engagement scores by **40%** through **ResNet** emotion detection, **WhisperX** speech detection and Gemma-powered **RAG**, leveraging LLM and API for enhanced functionality
- Collaborated CardShield, a **credit card fraud detection system** using **CatBoost** with Random Oversampling and advanced feature engineering, integrated a large language model interface to deliver real-time fraud insights and deployed using MLOPs and DevOps principles
- Innovated a **distracted driver detection system** using advanced deep learning models (**YOLOv8**, **ResNet50**), improving real-time identification of risky behaviours, enhancing driver safety and enabling accident prevention and deployed using MLOPs and DevOps principles
- Developed a **Tableau dashboard** analysing customer preferences, dish profitability, and demographics to identify high-potential outlet locations, clearly documenting the underlying business logic, driving **20%** projected revenue growth and **15%** marketing efficiency improvement

SKILLSET

- Software: Python Programming Language, SQL Server, Tableau, Power BI, Azure Databricks, Azure Services, Microsoft Excel, Microsoft PowerPoint, VBA, AWS Cloud, Tensorflow, scikit-learn, PyTorch, Pandas, Numpy, Seaborn, Matplotlib
- Skillsset: Machine Learning, Deep Learning, ETL Pipelines Development, Chatbot Development, Model Context Protocol, RAG, Operations Research, Hypothesis Testing, Stakeholder Management, Cross-Functional Collaboration, Predictive Analytics, Data Engineering, Econometrics, Supervised Learning, Unsupervised Learning, GenAI, Linear Regression, Logistic Regression, Neural Networks (CNN, RNN), Random Forest, Gradient Boosting, Casual Inference, Natural Language Processing (NLP), Timeseries Analysis

CERTIFICATIONS

- Great Learning Bootcamp: Python, SQL, SAS, Machine Learning, Deep Learning, Tableau
- Anthropic: Basic & Advanced topics for Model Context Protocol