

## 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/Data Engineer Intern*)

Feb 2025 - Sep 2025, Singapore

- Designed an insurance dashboard using **PowerBI** 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 Modeling and statistical analysis
- Automated end-to-end reporting for insurance data using **Python** and **Medallion architecture**, building **Azure** pipelines and workflows to cut manual workload by **70%**, improve data accuracy by **25%**, and reduce report delivery time by **50%**

### EXL SERVICE (*Consultant*)

Jan 2023 - Jul 2024, India

- Developed and executed monthly targeted marketing plans using **Excel**, **Python Programming Language**, **R**, **SQL**, **Snowflake**, resulting in a **40%** improvement in buyer outreach and improving user satisfaction for a key US client including Performance Monitoring of pricing strategies
- Executed a 4-step direct mail marketing process using **Python**, advanced **SQL** queries, **Snowflake** and **Excel** to score key metrics, suppress redundant data, and design a detailed strategy including offers and distribution frequency for two communication modes
- Conducted ad-hoc analysis in each process cycle using **Python**, **SQL**, **Snowflake** 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. Collaborated with cross-functional teams to implement pricing strategies, resulting in **30%** increase in customer satisfaction
- Utilized clustering algorithms to segment customer base for targeted marketing campaigns, resulting in a **20%** increase in conversion rates and improved customer engagement

### EXL SERVICE (*Business Analyst*)

Jul 2021 - Dec 2022, India

- Led ETL processes and automation from **SAS** to **Python**, **Snowflake**, **SQL** of **20+** insurance dashboards and reports enhancing efficiency by **80%** through automation, reducing manual intervention and processing time by 50% for a key US client using SQL software development
- Awarded **EXL Recognition Award** by client for optimal performance in Migration Project

### ZENATIX SOLUTIONS (*Business Analyst Intern*)

Jan 2020 - May 2020, India

- Developed and maintained data pipelines to ingest real-time sensor data, enabling predictive maintenance and optimizing energy consumption by **60%** using **Python**, **SQL**, **PowerPoint**, **Excel**, applying consulting methodologies to improve data-driven decision-making
- Automated analytics processes using **Python**, **SQL** reducing operational time by **50%** and accelerating data processing by **4x**, enabling faster insights for preventative electrical equipment maintenance and energy savings

## RESEARCH PROJECTS

### NATIONAL UNIVERSITY OF SINGAPORE

Singapore

- 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

## ACADEMIC PROJECTS

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Singapore

- 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**
- 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** principles on **CML** focusing on model design and performance tuning, and applying predictive modeling techniques
- 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** principles on **CML**
- Developed a **Tableau** dashboard analyzing customer preferences, dish profitability, and demographics to identify high-potential outlet locations, driving **20%** projected revenue growth and **15%** marketing efficiency improvement

## SKILLSET

- Software: Python, SQL, Tableau, PowerBI, MLOPs, Hadoop, Hive, CML, Databricks, Excel, PowerPoint Reporting Tools, Qlik
- Technical Skills: Machine Learning, Deep Learning, AWS Cloud – Logic App Workflow & Pipeline Development, ETL Automation, Data Modelling, Risk & Marketing Analytics, Data Visualization, Generative AI, OCR Integration, Chatbot Development, Model Context Protocol, Data Engineering, RAG, Data Analysis, Tensorflow, pytorch, scikit-learn
- Soft Skills: Cross-Functional Collaboration, Client & Stakeholder Management, Strategic Decision-Making, Hypothesis-Driven Analysis, Malleability in Fast-Changing Environments, Process Optimization & Automation Mindset

## CERTIFICATIONS

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