Aaron Ashwin Rajoo

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EDUCATION

National University of Singapore (NUS) **Dec 2023**
B.E. in **Mechanical Engineering,** Minor in **Computer Science |** GPA: **4.13/5.00 Distinction Honors**
Ngee Ann Polytechnic (NP) **May 2018**
Diploma in **Engineering Science | DSO Diploma Scholar | GPA: 3.93/4.00**

CERTIFICATION

Google Advanced Data Analytics, Google, Jul 2024 - (Certificate)
AWS Certified Cloud Practitioner, Amazon Web Services, Feb 2024 - (Certificate)
AnalyticsX: Big Data Analytics, AdelaideX, Mar 2024 - (Certificate)
Bloomberg Finance Fundamentals, Bloomberg, Oct 2024 - (Certificate)

SKILLS

Python, R, SQL, Snowflake, Azure Data Factory, ML, Power BI, Tableau, AWS, Azure, Git, SQL Server, Java, HTML/CSS, JavaScript, React, NodeJs

PROFESSIONAL EXPERIENCE

Contract Data Engineer| Gunvor **May 2024 – Present**
- Migrated on-premise data extraction packages for fundamental and market data from various exchanges to the cloud through designing ETL pipelines on Azure Data Factory.
- Performed UAT with complex SQL queries from multiple cloud databases in Snowflake before transforming, and building relationships with succinct visualisations to compare and provide automated data validation for over a million data points on PowerBi and Pandas.
- Developed a webscrapper on Python with Playwright and pandas to extract over 20,000 attributes of market data from a Data Manager Platform.
- Supported traders and analyst by developing unique derived market data curves, from sourcing, parsing and delivering critical data, and providing expertise for data visualisations.

Full Stack Software Engineer Intern | Cinch SG **May 2023 – July 2023**
- Leveraged Next.js to build Frontend UI tailored for finance team to track orders and monitor business performance.
- Executed ETL for backend infrastructure by utilizing Python and FastAPI to construct SQL queries against multiple databases to specified endpoint APIs for dynamic and reusable data retrieval.
- Collaborated with stakeholders across Finance and Customer Service teams to ensure web page met organizational needs.
- Utilized Jira to manage project tasks, user stories, and sprints, ensuring efficient workflow and task prioritization.

Machine Learning Intern | Makino Asia Group **May 2022 – July 2022**
- Trained a machine learning model (BGRU) on machining parameters in Python with TensorFlow to predict final surface conditions and operation times for the Wire EDM machines.
- Transformed data with various techniques including data cleaning, normalization, one-hot encoding, data inversion with Python and pandas, then formatted data to 3D Tensor inputs for ML.

PROJECT EXPERIENCE

Cervical Landmark Detector (Final Year Project) | NUS & NUH | (View project) – (GitHub) **Aug 2022 – Apr 2023**
- Utilized ML to develop an AI-Computer Vision solution on Python that enhances first-level diagnosis of airway difficulty.
- Implemented semi-supervised learning to train CNN models with a set of 2,000 labelled medical images. Pretrained models then generated pseudo-labels for more than 20,000 unlabeled images - to iteratively retrain CNN models further.
- Achieved a normalized mean error of less than 3% for locating and measuring relevant neck features.

LEADERSHIP EXPERIENCE

Executive Committee – Quartermaster | NP Guitar Club **Apr 2015 – Apr 2018**
- Performed, managed food catering, and handled ticket sales for biannual concerts of up to 400 attendees and facilitated training camps for over 200 members.
- Liaised with the school and external vendors to purchase and allocate equipment to a club of 60 students.
- Handled publicity and recruitment of 60 new members annually.