Choon Siong NG

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Education

- **National University of Singapore** **Aug 2019 – Jun 2024 (expected)**
  B.Comp. in Computer Science, Minor in Statistics
  - Relevant Coursework: Data Structures and Algorithms, Databases, Computer Networks, Operating Systems, Parallel Computing, Software Engineering, Web Development, Machine Learning, Natural Language Processing, Econometrics, Statistics

Experience

- **Bioinformatics Institute, Agency for Science Technology and Research Singapore** **May 2022 – Sep 2022**
  Intern
  - Enhanced the maintainability of CT-image angiography software by refactoring Python code and documenting software processes.
  - Proposed and implemented PyTorch-based AI models aimed at improving biomedical image segmentation performance.

- **RAENA** **May 2021 – Sep 2021**
  Data Analyst Intern
  - Developed Pandas scripts for creating ad-hoc reports to analyze revenue metrics from complex datasets.
  - Automated data management tasks across spreadsheets using Google Apps Script, enhancing operational efficiency.

Technical Projects

- **PeerPrep**
  - Did a group project in my software engineering course to develop a microservice-based application for practicing code interview questions with collaborative editing.
  - Wrote REST APIs for user management service and attempts service using JavaScript and Express.
  - Wrote the code for the profile page and the code attempt page in Next.JS with styling in Tailwind CSS
  - Containerised the services using Docker.

- **Quora question pair similarity**
  - Did a group project to build a predictive model for determining whether a given pair of questions are identical using question data from Quora. This was approached through the use of regression, tree-based models, CNNs and RNNs.
  - Created and tuned the regression and tree-based models for the project and performed t-tests to determine the effectiveness of our engineered features.
  - Wrote code related to evaluating the models and some code related to pre-processing the data.

- **Airplane arrival delay analysis**
  - Did a group project in my probabilistic inference course to build a predictive model for airport delays estimation and some analysis of factors contributing to delays.
  - Gathered information about weather and aircraft delay timings from different sources and fed them into a Bayesian model.

Technical Skills

Languages: JavaScript, Java, Python, C/C++, PostgreSQL, MongoDB
Frameworks/Libraries: Next.JS/React, Express, PyTorch
Tools: RabbitMQ, Docker, Git