ALEXY HACKMANN

A highly motivated bachelor's degree student in her penultimate year. An astute individual looking to leverage her technical skills to drive business solutions in real-world applications over the course of a **part-time internship**. Displays superb data sensitivity.

Expected graduation: May 2023

CONTACT DETAILS:

alexy001@e.ntu.edu.sg

meowster99@github.io

TECHICAL SKILLS:

- Python (NumPy, Scikit-Learn, Pandas, TensorFlow, PyTorch)
- Web Development with Django
- Machine Learning Algorithm Design
- Database (Postgres & SQL Server)
- R
- MATLAB
- C
- Java
- App Development (Dart & Flutter)
- UX and UI Design

SOFT SKILLS:

- Strategy & Planning
- Excellent Adaptability
- Problem Sensitivity
- Quick Learner

AWARDS:

- CCA Award for Individual Sporting Excellence
  Nanyang Junior College
- CCA Award for Team Sporting Excellence
  Nanyang Junior College
- SMC Scholarship for Academic Excellence
  St Margaret's Secondary School
- SMC Scholarship for Top-in-Cohort
  St Margaret's Secondary School

EDUCATION

Nanyang Technological University Aug 2019 – May 2023
Bachelor of Science in Mathematical and Computer Sciences
Course: Data Science and Artificial Intelligence, Penultimate Year

- Honours (Highest Distinction)
- Final-Year Project (In progress): Portfolio Management using Online Machine Learning Algorithms

Nanyang Junior College
'A'-Level Examinations

- Achieved distinctions in Mathematics, Chemistry, Physics, General Paper, and Project Work.
- Top 10% of graduating cohort based on rank points.

WORK EXPERIENCE

Data Science and Software Engineering Intern Jan 2022 – 27 May 2022
Seagate Singapore International Headquarters Pte. Ltd.

- Built full-stack web applications with Django back-end involving self-tuning Machine Learning (ML) Algorithms to streamline fault detection for Failure Analysis Engineers.
- Improved the system classification scores to determine hard-drive failures by >5% on test datasets and reduced system run-time by >50% through superior search domain reduction techniques.
- Implemented five unsupervised anomaly detection algorithms to detect anomalous hard drives based on serial data. Built algorithms into dynamic website to catch possible abnormal drives during the test process.
- Designed and established a pipeline for clustering datasets with >14M datapoints to help detect patterns in hard-drive failures based on customer and drive workload.
- Involved in presentations to upper-management and other stakeholders.

NOTABLE ACHIEVEMENTS

Carro X AWS Hackathon 2022

- Achieved 3rd placing out of >80 teams for our exceptional solutions in Time-Series Regression Analysis and Acoustic Engineering Problem Statements.

ACADEMIC PROJECTS

Data Analytics and Mining Project 2021

- In a team of four, built CBA and CMAR Classifiers in Python. Other classification methods were Decision Tree, Random Forest, and Support-Vector Machine Classifiers.
- Our CBA Classifier performed exceedingly well, with classification accuracy and f1-score better than all classifiers except Random Forest.

Big-Five Personality Trait Data Analysis 2020

- Applied various Python data science methods onto a dataset of >1M personality questionnaire answers. Methods applied were DBSCAN, K-Means Clustering, and Hierarchical Clustering.
- Learnt the application of unsupervised learning techniques on a large dataset.

LEADERSHIP & VOLUNTEER EXPERIENCE

Committee Member 2020-2021
Peer Helping Programme

- Underwent training to gain foundational knowledge of common mental health issues, and to be able to identify and reach out to students at risk.