Yun Luk Liu

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Education

KTH Royal Institute of Technology	**Stockholm, Sweden**
Master of Science in Machine Learning	2022 – 2024
Bachelor of Science in Electrical Engineering	2019 – 2022
University of Texas at Austin	**Austin, USA**
Exchange studies – Computer Science Major	Jan 2023 – May 2023

Work Experience

Goldman Sachs   **Stockholm, Sweden**
Summer Analyst   Jun 2023 – Sep 2023
- Software Engineering internship working with the Data Engineering team
- Presented the results of the internship to senior stakeholders

Scania   **Sodertalje, Sweden**
Summer R&D Intern   May 2022 – Jul 2022
- Worked with testing and debugging newly implemented software in electric trucks
- Held a presentation demonstrating how a new software program can be used for the development of ECUs in electric vehicles, the presentation has been shared with over hundreds of people in Scania's R&D department to aid them in adopting the software program

Hitachi Energy   **Stockholm, Sweden**
Summer R&D Intern   Jun 2021 – Aug 2021
- Designed and built several PCBs for EMI and EMC testing purposes using KiCad
- Ensured that the PCBs were following IEC standards for creepage and clearance distances for high power circuits

Projects

Subtyping of Alzheimer's disease using SuStaIn - Master's thesis   Jan 2024 – Jun 2024
- Subtyping of Alzheimer's disease(AD) using Subtype and Stage Inference(SuStaIn) model with FDG-PET data. The purpose was to identify subtypes of AD by using SuStaIn for clustering data and finding different temporal progression patterns.
- Ran experiments using many different setups in regards to normalization, clustering and dimensionality reduction
- Created an Autoencoder model for dimensionality reduction

Twitch chat analyzer – Group Project   Sep 2023 – Oct 2023
- Created a chrome extension to fetch live twitch chat streaming data via IRC socket and represented the sentiment in the chat by showing an emoji that updates every second
- Used Kafka for fault tolerant ingestion of data and Spark for processing of streaming data
- Retrieved the sentiment of each message using VADER sentimental analyzer
- Stored each message in Cassandra and created a Flask app to retrieve the latest sentiment

Pre-analysis of nanopore data for DNA basecalling – Bachelor thesis   Jan 2022 – May 2022
- Used ML to predict the accuracy rate of the data samples from nanopore DNA sequencing
- Built linear regression models as well as neural network models using Tensorflow/SKlearn

Skills

- **Programming Languages**: Python, Matlab, C
- **Other**: Pytorch, Pandas, Tensorflow, SKlearn, Keras, Arduino, HDL, LTSpice
- **Languages**: Swedish - Fluent, English - Fluent, Chinese(Hakka dialect) – Native Language, French – CEFR B2 level, Chinese(Mandarin) – Basic