

# Yun Luk Liu

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## Education

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

## Work Experience

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<b>Goldman Sachs</b>	<b>Stockholm, Sweden</b>
<i>Summer Analyst</i>	Jun 2023 – Sep 2023
<ul style="list-style-type: none"><li>• Software Engineering internship working with the Data Engineering team</li><li>• Presented the results of the internship to senior stakeholders</li></ul>	
<b>Scania</b>	<b>Sodertalje, Sweden</b>
<i>Summer R&amp;D Intern</i>	May 2022 – Jul 2022
<ul style="list-style-type: none"><li>• Worked with testing and debugging newly implemented software in electric trucks</li><li>• 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&amp;D department to aid them in adopting the software program</li></ul>	
<b>Hitachi Energy</b>	<b>Stockholm, Sweden</b>
<i>Summer R&amp;D Intern</i>	Jun 2021 – Aug 2021
<ul style="list-style-type: none"><li>• Designed and built several PCBs for EMI and EMC testing purposes using KiCad</li><li>• Ensured that the PCBs were following IEC standards for creepage and clearance distances for high power circuits</li></ul>	

## Projects

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<b>Subtyping of Alzheimer's disease using SuStaIn - Master's thesis</b>	Jan 2024 – Jun 2024
<ul style="list-style-type: none"><li>• 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.</li><li>• Ran experiments using many different setups in regards to normalization, clustering and dimensionality reduction</li><li>• Created an Autoencoder model for dimensionality reduction</li></ul>	
<b>Twitch chat analyzer – Group Project</b>	Sep 2023 – Oct 2023
<ul style="list-style-type: none"><li>• 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</li><li>• Used Kafka for fault tolerant ingestion of data and Spark for processing of streaming data</li><li>• Retrieved the sentiment of each message using VADER sentimental analyzer</li><li>• Stored each message in Cassandra and created a Flask app to retrieve the latest sentiment</li></ul>	
<b>Pre-analysis of nanopore data for DNA basecalling – Bachelor thesis</b>	Jan 2022 – May 2022
<ul style="list-style-type: none"><li>• Used ML to predict the accuracy rate of the data samples from nanopore DNA sequencing</li><li>• Built linear regression models as well as neural network models using Tensorflow/SKlearn</li></ul>	

## Skills

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- **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