CHU-CHENG FU

An enthusiast in Software Development and Data Science

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EXPERIENCE

Full-Stack Engineer(incoming)
Pluss

📅 Jan 2021 - current   📍 Stockholm

- Full-stack engineering intern in a pre, take-off and post launch phase of an innovative startup. Tech stacks include back-end, front-end and web infrastructure development.

Master Thesis
ABB

📅 Sep 2019 – Sep 2020   📍 Belgium

- **Automatic Machine Learning for Energy Forecasting**
  - Tailored AutoML pipelines for multiple time-step ahead energy data prediction
  - **Saved up to 70% of time** comparing to traditional ML methods
  - Devised advanced algorithm for measuring uncertainty of ensemble tree-based ML models

Substitution Military Service
National Conscription Agency

📅 Aug 2017 – Aug 2018   📍 Taiwan

- Coordinated lifelong-learning courses and promoted the courses via social media

EDUCATION

Double M.Sc. Energy for Smart Cities
KU Leuven, KTH Royal Institute of Technology

📅 Aug 2018 – Sep 2020   📍 Belgium, Sweden

- **Master Thesis: 16/20**
- Elective courses in AI/ML master's program: Analysis of Large Scale Social Network, Big Data Analytic Programming, Data and Statistical Modeling, Data Mining, Deep Learning for Data Science, Machine Learning

B.Sc. Electrical Engineering
National Cheng Kung University

📅 Sep 2012 – June 2017   📍 Taiwan

- **Outstanding student 2014(Ranked top 5%)**
- Computer Science courses: Computer Organization, Operating Systems, Software Engineering, System Analysis and Design Theory, Web Programming, Open-Source Software Development

TOOLS AND KNOWLEDGE

Java | JavaScript | Python | C | R | git | Hadoop
Spark | SQL | AWS | GCP | MongoDB | Node.js
React | Machine Learning | Data Mining

SELECTED PROJECTS

Full stack open
Hesinki University

📅 Dec 2020 - current   📍 [Github](#)

- Developed web applications with React, Node.js, MongoDB, and RESTful API.

Big Data Analytic Programming
KU Leuven

📅 Oct 2019 - June 2020   📍 Belgium

- Improved efficiency of Apriori text mining by SIMD in C
- **Designed a 23GB data scale** Hadoop MapReduce application of raw GPS data for Los Angeles taxi trip analysis in Java
- **Boosted up to 10% accuracy** of online spam filter classifiers by realizing advanced approximation algorithms in Java
- **Saved up to 50% of prediction time** of KNN image classifier by implementing product quantization algorithm in Java

Verification of Super Convergence in Convolutional Neural Network
KTH Royal Institute of Technology

📅 March 2019 - June 2019   📍 Sweden

- Tested and realized super convergence in DNN for multiple image classifiers published by US Navy lab
- **Gain up to 5% on testing set accuracy** and **improved 30% on training time efficiency**

AWARDS

Datathon 2020: The best Visualization Team
KU Leuven

📅 Feb 2020   📍 Belgium

- **Data Science hackathon competition of around 45 teams**
  - Created an interactive heat map displaying pollution in Leuven city
  - Utilized a 3D scatter plot to demonstrate pollution

OPEN-SOURCE CONTRIBUTIONS

Auto-sklearn

📅 Mar 2020-Sep 2020   📍 [Github 1](#), [2](#)

- **Contributed to open-source automatic machine learning software**
  - Developed and extended multi-output regression in AutoML
  - Identified and repaired bugs in evaluation pipelines

LANGUAGES

English 🟢🟢🟢🟢🟢
Mandarin 🟢🟢🟢🟢⚪
Swedish 🟢⚪⚪⚪⚪