Yu-Tang, Shen

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EDUCATION

San Jose State University 2021 - 2023
Master of Science in Computer Science

Chinese University of Hong Kong 2015 - 2019
Bachelor of Science in Computer Science

WORK EXPERIENCE

Machine Learning Assistant Engineer, Winbond Jan 2021 - Aug 2021
I worked as an ML assistant engineer at Winbond, responsible for utilizing ML models to discover insights from text data, including patent, execution log file, and technical news.

Software Engineer, Cellmax Life Jul 2019 - Nov 2019
I was responsible for database design, desktop application development, neural network development, and automatizing procedures for different departments.

Data Analyst Intern, Shopee Jul 2018 - Aug 2018
My job included tracking performance on push notifications, crawling price data, and cleaning data using Python and Excel.

TECHNICAL STRENGTHS

ML and data analysis	Python, TensorFlow, R, OpenCV, Power BI
Software engineering	HTML, CSS, jQuery, Vue.js, React.js, Github
Database system	SQL, MySQL
Operating system	Ubuntu, CentOS, Shell script

PROJECTS

Named Entity Recognition Apr 2021 - Aug 2021
I worked with my team to deliver an ML model that can identify the growing trend in the semiconductor market. I adopted the ALBERT named entity recognition, Jieba word segmentation, and Fasttext word embedding models to train and identify the key entities. Furthermore, I visualized the result with Power BI to enable the business users easily grasp the merging trend in the market.

Patent Map Jun 2021 - Aug 2021
I utilized regular expression and data visualization tools to help business user to compare the strength of Winbond and its competitor. I cleaned the inconsistent patent data with regular expression, Pandas, and Numpy libraries in Python, and I eventually visualized the data with Power BI and Neo4j to demonstrate internal / external relationships.

Circulating Tumor Cells Recognition Jul 2019 - Nov 2019
While working at Cellmax, I cooperated with Acer on developing a neural network on recognizing circulating tumor cells (CTCs), and my job was to prepare the confirmed CTCs image for training. I first tried the convolution matrix to detect the edges, but the low intensity from the microscope led to unsatisfying results. I then adopted the Watershed segmentation algorithm, and the results were accurate enough for the scientist in the medical lab to identify CTCs and to further label the training data.

Report Generating Application Aug 2019
I automated the medical report making process to eliminate human error, which can sabotage the credibility of the report. I developed an application with GUI that can automatically fetch data and form different reports based on various templates, and eventually reduced the time on generating a report from at least 30 minutes to less than a minute.

Database System Sep 2019

I designed a database system in BCNF while satisfying the CAP regulation on data storage. The project is finished in MySQL, and additionally I completed a front-end interface with Vue.js and PHP for my colleague to access data.

Motion Retargetting 2018 - 2019

The project aims at retargetting a motion from a skeleton to another. My teammate and I tried utilizing non-linear optimization function from Matlab to retarget each joint to a corresponding point in 3D space. And we further adopted a GAN network developed by NVIDIA, Style GAN, trying to achieve a more natural result by generating a series of frames that the proportion of the skeleton meets our need.

EXTRACURRICULAR

Volunteering

Volunteered at Sri Lanka, teaching primary school students English 2016

Volunteered in Guangxi, China teaching middle school students math, Chinese, and English 2016

Sports

Second place of Inter College Volleyball Game at NUS 2018

Winner of the Taiwanese Student Association Spring Basketball Game at CUHK 2017

Third place of E-League Basketball Game at CUHK 2016

Winner of the Inter College Volleyball Game at CUHK 2016

Winner of the Taiwanese Student Association Fall Basketball Game at CUHK 2015

Programming

Competed in the Cathay Pacific Hackathon 2017