Piratach Yoovidhya

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EDUCATION

Carnegie Mellon University • Pittsburgh, PA *(August 2018 - expected May 2022)*
B.S. in Computer Science, Concentration in Computer Systems GPA: 3.35, Dean's List

Selected Coursework:

15-410, Operating Systems (*Fall 2021*)
15-451, Algo Design and Analysis (*Spring 2021*)
15-440, Distributed Systems (*Fall 2020*)
15-445, Database Systems (*Fall 2020*)
15-210, Data Structures and Algorithms (*Spring 2020*)
15-330, Intro to Computer Security (*Spring 2020*)
15-259, Probability and Computing (*Spring 2020*)
15-251, Great Theoretical Ideas in CS (*Fall 2019*)

WORK EXPERIENCE

CMU CS Dept. • Research Assistant • *Pittsburgh, PA* ***(Nov 2020 - current)***

- Currently working with a Professor and a PhD student on a redesigned memory hierarchy.
- Implemented various systems that utilizes said system.
- The paper on this has been submitted to a conference.

ThaiSC • Research Intern • *Bangkok, Thailand* ***(May 2021 - Aug 2021)***

- Investigated potential bottlenecks in the distributed training of recommender models across multiple nodes.
- Focused on Facebook's DLRM in particular, profiling some other recommender models (e.g. NCF, DeepFM) for reference.

ConnectWolf • Database Engineer Intern • *Pittsburgh, PA* ***(May 2020 - August 2020)***

- Worked within the database team to design the backend for the company's mobile app
- Researched into potential scalable database management systems that could be used as the company grows larger

CMU CB Dept. • Research Assistant • *Pittsburgh, PA* ***(Jan 2020 - May 2020)***

- Worked with Professor Robert Murphy in implementing *Bioactive*, a program that is used to assist in research through active learning and model construction
- Fixed database issues that prevented several campaigns from working as intended
- Implemented a continuous modeler based on linear regression and modularized the code for other files

KBTG • Data Science Intern • *Bangkok, Thailand* ***(Jun 2019 - Aug 2019)***

- Worked in the data science team to develop a feature that evaluated the price of a car (for collateral) from a photo to be used in K-Plus, Thailand's #1 mobile banking app
- Successfully developed a license plate and vehicle image recognition model using Keras, and connected it to a pipeline that would function as a part of the vehicle price evaluation program

PERSONAL PROJECTS

Desktop-Vacuum | C++

- Developed a software used to sort and clean files in a directory, both manually and automatically (listening to new additions)
- Built a working interface for the software using the SFML library

A Sketchy Quest | Python

- An interactive side-scroller video game that consists of a shape recgonition algorithm which allowed players to create objects by drawing them

ConvoCoach | Python

- Developed a basic, conversation-based program (using cloud NLP and speech APIs) aimed to improve autistic children's conversational skill alongside 3 other colleagues

The Atlas Project - Autonomous Buggy | Python, C++

- Part of the software and mechanical team that works on an autonomous buggy that competes during *Carnival* annually

ACHIEVEMENTS & SKILLS

Languages: Python • C++ • C • SML • Go • Java • SQL • HTML • Javascript • Thai • English • Mandarin

TartanHacks | Best Social Welfare Hack *(Februrary 2019)*
Thai Embassy's Database Platform | Winner *(September 2019)*