# 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)
15-251, 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**

 $\textbf{Languages:} \ \ \textbf{Python} \bullet \textbf{C} + + \bullet \textbf{C} \bullet \textbf{SML} \bullet \textbf{Go} \bullet \textbf{SQL} \bullet \textbf{HTML} \bullet \textbf{Thai} \bullet \textbf{English} \bullet \textbf{Mandarin}$ 

TartanHacks | Best Social Welfare Hack

(Februrary 2019)

Thai Embassy's Database Platform | Winner

(September 2019)