# 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 (Current)	15-210, Data Structures and Algorithms
15-451, Algorithm Design and Analysis	15-330, Intro to Computer Security
15-440, Distributed Systems	15-259, Probability and Computing
15-445, Database Systems	15-251, Great Theoretical Ideas in CS

#### WORK EXPERIENCE

### CMU CS Dept. • Research Assistant • Pittsburgh, PA

 $(Nov \ 2020 - current)$ 

- Currently working with a Professor and a PhD student on redesigning the memory hierarchy.
- Implemented various applications that utilizes the system.
- The paper on this has been submitted to ASPLOS'22 and is currently under review.

## 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

#### **EXTRACURRICULAR ACTIVITIES**

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

• Software lead of the team that works on an autonomous buggy that competes during Carnival annually

#### 98-242: Intro to Esoteric Languages | Various

• An **instructor** for the student-taught course that introduces new, esoteric concepts and programming languages to students.

## 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

## **ACHIEVEMENTS & SKILLS**

Languages: Python • C++ • C • Assembly • SML • Go • Java • SQL • HTML • Javascript

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