# Pranav Kumar

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## **EDUCATION**

BS in Computer Science, Carnegie Mellon University

RELEVANT COURSEWORK:

15-410\* - Operating System Design and Implementation

QPA: 4.00/4.00

15-411 - Compiler Design

Dean's List

15-213 - Introduction to Computer Systems

(All semesters)

15-210 - Parallel and Sequential Data Structures and Algorithms

# WORK EXPERIENCE

#### Production Engineering Intern | Facebook

May - August 2019

- Developed a build automation service for regression detection and parallel building of binaries
- Enabled multiple asynchronous builds, improving firefighting efficiency by  $\mathbf{more}$  than  $\mathbf{10x}$

## Software Engineering Intern | Petuum Inc

June - August 2018

- Developed a backend datapull API using MariaDB and Django for ML engineers to use while training models
- Used Apache Kafka to integrate real-time streaming data with ML model
- Improved model inference runtime from 30+ minutes to 90 seconds (20 times speedup)

#### **Lead Teaching Assistant** | **15-122**: Principles of Imperative Computation

Spring 2018 - Present

• Taught labs, graded homeworks and hosted office hours for students

#### Projects and Extracurriculars

#### No Duckling is Ugly | PennApps 2018

Sept 2018

- An IoT based anti-bullying system developed at PennApps 2018
- Used sentiment analysis, speech to text and NLP to detect bullying
- Best IoT Hack and Best Education Hack at PennApps 2018

## Ugly Duckling | HackCMU 2017

Sept 2017

- An autonomous, deep-learning based robotic camera operator to follow a person using facial recognition
- Best Use of Machine Learning by Google, \$1000 cash prize at CMU 50th anniversary celebration, as well as funding from CMU Board of Trustees

#### TECHNICAL SKILLS

Languages: C, Python, OCaml, Java, JavaScript, SML, x86

Applications/Technologies: Git, Docker, UNIX, Django, Vim, REST, ROS, MySQL, Apache Kafka

# Honors and Achievements

Best IoT Hack, Best Education Hack awards at PennApps 2018

Best Use of Machine Learning award by Google at HackCMU 2017

Top in Country and Top 5 in World in Cambridge AS and A level Computer Science