

# Pranav Kumar

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Citizenship: USA

## EDUCATION

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**BS in Computer Science, Carnegie Mellon University**

MAY 2021 (Anticipated)

RELEVANT COURSEWORK:

**15-410\*** - Operating System Design and Implementation

**QPA: 4.00/4.00**

**15-411** - Compiler Design

Dean's List

**15-330\*** - Introduction to Computer Security

(All semesters)

## WORK EXPERIENCE

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**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 **more than 10x**

**Software Engineering Intern | Petuum Inc**

JUNE - AUGUST 2018

- Developed a backend datapull API using MariaDB and Django for ML engineers
- 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

- Responsible for leading a course of 480+ students and 40+ teaching assistants
- Teach data structures and algorithms to Carnegie Mellon CS undergraduates

## PROJECTS AND EXTRACURRICULARS

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**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

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

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

## HONORS AND ACHIEVEMENTS

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**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