

Pranav Kumar

PHONE: 412-726-1606

EMAIL: pmkumar@cmu.edu

Citizenship: USA

EDUCATION

B.S. in Computer Science, Carnegie Mellon University

MAY 2021 (Anticipated)

RELEVANT COURSEWORK:

QPA: 4.00/4.00

15-410 - Operating System Design and Implementation

Dean's List

15-411 - Compiler Design

(5/5 semesters)

15-330 - Introduction to Computer Security

15-213 - Introduction to Computer Systems

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 **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 (**20x 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

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/C++, Python, OCaml, Java, Rust, JavaScript, SML, x86/x86-64

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