

Pranav Kumar

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EDUCATION

MAY 2021 **BS in Computer Science, Carnegie Mellon University**
(Anticipated) RELEVANT COURSEWORK: **15-251** - Great Theoretical Ideas in Computer Science (Current), **15-150** - Principles of Functional Programming (Current),
QPA: 4.00 Dean's List (Fall 2017) **15-122** - Principles of Imperative Programming, **15-151** - Mathematical Foundations for Computer Science

WORK EXPERIENCE

SPRING 2018 **Teaching Assistant** for 15-122: Principles of Imperative Computation

- I teach labs, grade homework and host office hours for students

MAY 2016 **Intern at Cerner Corporation**

- Synced client and server data with PHP and JavaScript for Smart Health, a cross-platform mobile application to track adolescent health
- Laid foundation for internationalization of the entire application using JSON to store key words for easy translation between languages

2014 - 2015 **Student Developer at Mediawiki Foundation**

- Worked on open source applications such as Wikipedia, Mediawiki, etc.
- Learned Git, PHP, and the practice of code review in the process

PROJECTS AND EXTRACURRICULARS

SEPTEMBER 2017 **RoboBuggy**
- PRESENT

- RoboBuggy is an autonomous competitor in the buggy races at CMU
- Member of infrastructure development team and software representative
- Use ROS, C++, and Python to build infrastructure to drive the buggy

SEPTEMBER 2017 **Ugly Duckling at HackCMU 2017**

- Won Google's "Best Use of Machine Learning" Award, \$1000 cash prize at CMU 50th anniversary celebration
- Created an autonomous, deep-learning based robotic camera operator to follow a person using facial recognition

JULY 2016 **Multi-robot pathfinding** at Stanford University

- Created a multi-robot pathfinding optimization program at Stanford Pre-Collegiate Summer Institutes
- Implemented in Python using a coupled approach and BFS, DFS, Dijkstra's, and A* algorithms

TECHNICAL SKILLS

Languages: Python, C, Java, JavaScript, SML

Applications/Technologies: Git, Vim, ROS

HONORS AND ACHIEVEMENTS

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