

Pranav Kumar

PHONE: 412-726-1606

EMAIL: pmkumar@andrew.cmu.edu

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), **15-122** - Principles of Imperative Programming, **15-151** - Mathematical Foundations for Computer Science
QPA: 4.00

WORK EXPERIENCE

SPRING 2018 **Teaching Assistant** for 15-122 Principles of Imperative Computation
• Future TA for 15-122

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

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