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Palo Alto High School

Raphael Long

rafilong.com

EDUCATION

University of Illinois at Urbana Champaign

BS Computer Science in Engineering High School Diploma 2017-2021 2013-2017 -.--/4.00 GPA 4.00/4.00 Unweighted GPA **EXPERIENCE Camp Counselor, FIRST Robotics Competition Team 8** Summer 2017 - Taught basic VCS usage, Python, CSS, and HTML to middle school students **Advanced Authentic Research Program Student** 2016 - 2017 - Used MATLAB to model propagation of noise in wireless systems - Wrote research paper and presented at end of year showcase Software Captain, FIRST Robotics Competition Team 6036 2016 - 2017 - Led team of 4 to develop autonomous and remote control robot code - Instructed students in C++, Java, UNIX, and version control Mentor, Design Farm Summer 2016 - Instructed group of 8 students in design process and principles - Worked on pneumatic bike and underwater drone prototypes Mentee, Mentored by Moritz Hardt 2015 - 2016 - Analyzed data in Python using numpy to illustrate unexpected bias in machine learning - Constructed use cases to test the effectiveness of definitions of prejudice Assistant Coach, Wheel Kids Bike Club Summer 2015 - Taught bike safety and led groups of 15 kids on local bike trips **FIRST Robotics Competition Team 8** 2013 - 2016 Web Captain 2014 - 2016 - Lead team of 5 and instructed students in HTML, CSS, JS, and version control **Scouting Captain** 2013 - 2016 - Developed system to analyze competitor robots' ability and create ranked list of teams - Delegated tasks and managed up to 30 members in competition setting Web Member 2013 - 2016 **PROJECTS** Nov. 2017 - Ongoing Web-based DnD Game **PygHack Participant** Sep. 2017 - Ongoing - Created an app to alert police of illegal parking, specifically in handicap spots **Schedule Optimizer** Sep. 2017 - Ongoing - A webapp to create schedules for students - Optimizes for wake-up, starting times, course difficulty, etc Arch Linux on Laptop and Raspberry Pi Sep. 2017 - Nov. 2017 Personal Website (rafilong.com) Sep. 2017 - Ongoing **Built a Bicycle** Aug. - Sep. 2017 **SKILLS** Proficient with Java, Python (numpy, pandas), Git, UNIX, HTML, and CSS

AWARDS

2017 - AP Scholar with Distinction

2016 - National Merit Scholarship Finalist

2015 - English Department Award

2014 - Foreign Language Department Award

Experienced with Javascript (Node), MatLab, C++, MongoDB, and Lua

2014 - Math Department Award