

**Raphael Long**

rafilong.com

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(650) 630-9731

**EDUCATION**

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University of Illinois at Urbana Champaign	Palo Alto High School
BS Computer Science in Engineering	High School Diploma
2017-2021	2013-2017
-.--/4.00 GPA	4.00/4.00 Unweighted GPA

**EXPERIENCE**

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<b>Advanced Authentic Research Program Student</b>	2016 - 2017
<ul style="list-style-type: none"><li>- Used MATLAB to model propagation of noise in wireless systems</li><li>- Created research paper and presented at end of year showcase</li></ul>	
<b>Software Captain, FIRST Robotics Competition Team 6036</b>	2016 - 2017
<ul style="list-style-type: none"><li>- Led team of 4 to develop autonomous and remote control robot code</li><li>- Instructed students in C++, Java, UNIX, and version control</li></ul>	
<b>Mentor, Design Farm</b>	Summer 2016
<ul style="list-style-type: none"><li>- Instructed group of 8 students in design process and principles</li><li>- Worked on pneumatic bike and underwater drone prototypes</li></ul>	
<b>Mentee, Mentored by Moritz Hardt</b>	2015 - 2016
<ul style="list-style-type: none"><li>- Analyzed data in Python using numpy to illustrate unexpected bias in machine learning</li><li>- Constructed use cases to test the effectiveness of definitions of prejudice</li></ul>	
<b>Assistant Coach, Wheel Kids Bike Club</b>	Summer 2015
<ul style="list-style-type: none"><li>- Taught bike safety and led groups of 15 kids on local bike trips</li></ul>	
<b>FIRST Robotics Competition Team 8</b>	2013 - 2016
<b>Web Captain</b>	2014 - 2016
<ul style="list-style-type: none"><li>- Lead team of 5 and instructed students in HTML, CSS, JS, and version control</li></ul>	
<b>Scouting Captain</b>	2013 - 2016
<ul style="list-style-type: none"><li>- Developed system to analyze competitor robots' ability and create ranked list of teams</li><li>- Delegated tasks and managed up to 30 members in competition setting</li></ul>	
<b>Web Member</b>	2013 - 2016

**PROJECTS**

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<b>PygHack Participant</b>	Sep. 2017 - Ongoing
<ul style="list-style-type: none"><li>- Created an app to alert police of illegal parking, specifically in handicap spots</li></ul>	
<b>UIUC ACM Projects Group Member</b>	Sep. 2017 - Ongoing
<b>Schedule Optimizer</b>	Sep. 2017 - Ongoing
<ul style="list-style-type: none"><li>- A webapp to create schedules for students</li><li>- Optimizes for wake-up, starting times, course difficulty, etc</li></ul>	
<b>Arch Linux on Laptop and Raspberry Pi</b>	Sep. 2017 - Ongoing
<b>Personal Website</b> (rafilong.com)	Sep. 2017 - Ongoing
<b>Built a Bicycle</b>	Aug. - Sep. 2017

**SKILLS**

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Proficient with Java, Python (numpy, pandas), Git, UNIX, HTML, and CSS  
Experienced with Javascript (Node), MatLab, C++, MongoDB, and Lua

**AWARDS**

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2017 - AP Scholar with Distinction  
2016 - National Merit Scholarship Finalist  
2015 - English Department Award  
2014 - Foreign Language Department Award  
2014 - Math Department Award