Raphael Long

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EDUCATION

University of Illinois at Urbana Champaign	Palo Alto High School
B.S. of Computer Science	2013-2017
May 2021	4.00/4.00 Unweighted GPA
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Relevant Coursework:
Data Structures (CS 225), Discrete Structures (CS 173), Software Design Studio (CS 126)

EXPERIENCE

Capital One   Champaign, IL
Software Engineering Intern   Jan. 2018 - Present
- Constructed internal data visualization tools
- Updated legacy code to use Angular 5 and AWS

SIG IR   Champaign, IL
- Scraping smoothie recipes to find correlation between ingredients   Jan. 2018 - Present

GNU Linux User Group   Champaign, IL
- Explored contributing to the open source community   Sep. 2017 - Present

Advanced Authentic Research Program   Palo Alto, CA
- Used MATLAB to model propagation of noise in wireless systems   Sep. 2016 - May 2017
- Wrote a research paper and presented at end of year showcase

The DFarm   Palo Alto, CA
Mentor   May 2016 - Aug. 2016
- Instructed group of 8 students in design process and principles
- Created underwater drone and wearable breathalyzer prototypes

Mentored by Moritz Hardt   Palo Alto, CA
- Analyzed data in Python using numpy to illustrate unexpected bias in machine learning   Nov. 2015 - May 2016
- Created mathematical definitions of fairness and prejudice

FIRST Robotics   2013 - 2017
Camp Counselor (Team 8)   July 2017 - Aug 2017
- Taught basic VCS usage, Python, CSS and HTML to middle school students
Software Captain (Team 6036)   Jan. 2016 - May 2017
- Led team of 4 to develop autonomous and remote control robot code and taught C++, Java, UNIX and Git
Web Captain (Team 8)   May 2014 - Jan. 2016
- Led team of 5 and taught HTML, CSS, JS and Git
Scouting Captain (Team 8)   Feb. 2013 - Jan. 2016
- Developed system to analyze competitor robots' ability and managed 30+ members in competition

PROJECTS

Schedule Optimizer   Sep. 2017 - Dec. 2017
- A webapp to create schedules for students
PygHack Participant   Sep. 2017 - Sep. 2017
- An app to alert police of illegal parking, specifically in handicap spots
Arch Linux Workstation Install   Sep. 2017 - Nov. 2017

SKILLS

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

AWARDS

2017 - AP Scholar with Distinction
2016 - National Merit Scholarship Finalist