

William Y. Lee

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EDUCATION:

Current: Swarthmore College (CS, Math), Class of 2020

Previous: Palo Alto High School, Class of 2016

- (GPA: 3.98/4.00)

Relevant Coursework:

Swarthmore CS 35 Data Structures and Algorithms

Swarthmore College | August 2016 - December 2016

- Learned to design complex algorithms and write proofs of correctness/runtime for algorithms.
- Gained experience in C++ through the implementation of data structures, algorithms, and projects.

Stanford CS 161 Design and Analysis of Algorithms Student

Stanford University | June 2016 - August 2016

- Audited Stanford's CS 161 class on the Design and Analysis of Algorithms and received a final grade of A- in the class.

Webmaster, The Paly Voice, Palo Alto High School (palyvoice.com)

Palo Alto High School | August 2015 - June 2016

- Worked in a team of 4 to maintain and improve the Paly Voice news publication website.
 - Designed new home, author, staff, and search pages.
 - Used JavaScript to detect Adblock and change page layout accordingly.
 - Acquired experience with bash/unix, nginx, HTML/JS/SQL/PHP, wordpress, cloudflare.

AP Computer Science A: Covered the AP Computer Science curriculum at Palo Alto High School.

CS Capstone: Created a website for my high school's lost and found as my CS Capstone project.

WORK EXPERIENCE:

Software Engineering Intern, NASA Ames Research Center

NASA Intelligent Robotics Group | June 2016 - Present

- Developed a web interface allowing mapping of control points between images taken by astronauts on the ISS to Google Earth satellite imagery using the OpenSeadragon library.
- Implemented image manipulation (contrast/brightness adjustment, rotation, zoom, etc) to allow easier identification of landmarks to map between ISS imagery and Google Earth imagery.
- Currently working on client-side histogram image equalization.
- Project hardware planned to go to the international space station on Falcon 11 in February 2017

Research Intern, NASA Ames Research Center

NASA Human Systems Integration Division | June 2015 - June 2016

- Studied human autonomic responses during simulated Orion spacecraft re-entry. Helped conduct research evaluating the effectiveness of Autogenic Feedback Training Exercises (AFTE) in mitigating motion sickness symptoms caused by spaceflight and microgravity.
- Programmed data processing algorithms in Dadisp to automate and improve data processing efficiency in multiple data channels such as respiration rate and blood pressure by approximately 15%

SKILLS:

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|--------------|-------------------|--------------|---------|----------|
| • Java | • Python | • JavaScript | • MySQL | • Matlab |
| • C++ | • Unix/Bash | • JQuery | • PHP | • Git |
| • Algorithms | • Data Structures | | | |

AWARDS:

- National AP Scholar: Completed 8 AP exams with a score of 4 or higher.
- President's Volunteer Service Award (x2): Volunteered a cumulative 450+ hours over 4 years.