

William Y. Lee

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EDUCATION:

Current: Swarthmore College (Computer Science; Mathematics, English Literature), Class of 2020 (GPA: 4.00/4.00)

Previous: Palo Alto High School, Class of 2016 (GPA: 3.98/4.00)

Relevant Coursework:

Swarthmore CS72 Computer Vision

- Studied computer vision techniques including neural networks, adaboost, k-means clustering, stereo vision, structure from motion, and homographies.

Coursera CS229 Machine Learning

- Completed Andrew Ng's Stanford Machine Learning course on Coursera (along with both the Coursera assignments and the assignments on the Stanford CS229 course page).

Stanford CS161 Design and Analysis of Algorithms

- Audited Stanford's CS 161 class on the Design and Analysis of Algorithms.

Swarthmore CS35 Data Structures and Algorithms

- Studied and implemented fundamental data structures and algorithms in C++

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

Palo Alto High School | August 2015 - June 2016

- Full stack web development

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 | May 2017 - August 2017

- Parallelize code, optimize algorithms, and improve the build/test system of the Ames Stereo Pipeline, NASA's geodesy/stereogrammetry suite.

Staff Member, Swarthmore College Computer Society (SCCS)

Swarthmore College | November 2016 - Present

- Selected from a competitive pool of applicants for membership in the SCCS (~10% acceptance).
- Lead a team of 4 other SCCS members in creating a URL shortener (swat.life)

Software Engineering Intern, NASA Ames Research Center

NASA Intelligent Robotics Group | June 2016 - August 2016

- Developed a web interface allowing mapping of control points between images taken by astronauts on the ISS to Google Earth satellite imagery using jQuery and 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.

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 algorithms in SPL (for 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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|-------------------|----------|--------|--------------------|
| • Data Structures | • Python | • Git | • Web Development |
| • Algorithms | • C++ | • Unix | • Machine Learning |

AWARDS:

- National AP Scholar: Completed 8 AP exams with a score of 4 or higher (all 5s).
- President's Volunteer Service Award (x2): Volunteered a cumulative 450+ hours over 4 years.