

Andrew H. Lu

☎ (510) 928-2668 • ✉ alu@ucsb.edu • 🌐 andrewhlu.com • 🔗 linkedin.com/in/andrewhlu

Education

University of California, Santa Barbara

- Bachelor of Science in Electrical Engineering (Expected Date of Graduation: June 2021)
- Cumulative GPA: 3.91
- College of Engineering Honors Program
- Relevant Coursework: Problem Solving with Computers (C++), Discrete Mathematics, Analog and Digital Circuits & Systems

Skills

- JavaScript, Node.js, HTML, and CSS scripting
- Basic C++ and MATLAB programming
- Learning the Electron framework
- Proficiency in Programming Tools: Git, GitHub, Sublime Text, Postman, npm
- Proficiency in Microsoft Office
- Experience with 3D Modeling (Fusion 360)

Projects *(Learn more about these projects at andrewhlu.com)*

IEEE Website (ucsbieee.org) – Jekyll-based website, member database, and online store for UCSB IEEE. Sep 2018

- Transitioned to Jekyll and Markdown for frontend to allow easy editing by officers and project managers.
- Created an e-commerce store using Square's API and lab membership database using Firebase.

UCSB Dining Cortana Skill – Voice assistant skill to recommend a Dining Common based on food you like. Apr 2018

- Utilized Microsoft Bot Framework and Azure to process user input and store data. Written in Node.js using JavaScript.

ScaVision Hunt – A real-time multiplayer scavenger hunt, in real life. Jan 2018

- Created using Google Cloud's Vision Machine Learning API and Firebase (Realtime Database, Cloud Functions, Storage, Hosting).
- Backend written in Node.js using JavaScript, frontend created using HTML/CSS and JavaScript.

Candy Bar Fundraiser POS – A modified Point-of-Sale to simplify candy checkout and inventory. Mar 2017

- Created using a custom Google Scripts backend linked to a spreadsheet. Revised in 2018 with an HTML frontend.
- First deployed for 2017 fundraiser - Sold 7,020 candy bars compared to 4,690 in previous year.

Blue Pearl Scanner – Mobile ticket scanning for shorter lines and efficient check-in. Jan 2017

- Created using a custom Google Scripts backend linked to a spreadsheet, and an external app barcode scanner.
- Revised in 2018 to include QuaggaJS, a web-based barcode scanner, and an HTML frontend.

Honors and Activities

- **Dean's Honors Recipient, 3 Quarters** – Awarded to students with a GPA of 3.5 or higher Jun 2018
- **UCSB Dining Cortana Skill** – Honorable Mention Recipient at Microsoft Cortana Hackathon Apr 2018
- **ScaVision Hunt** – Event Finalist and Honorable Mention Recipient from Firebase, SB Hacks Jan 2018
- **Fundraiser POS and Blue Pearl Scanner** – Scholarship Recipient, Dougherty Valley HS Music Program May 2017
- **VEX Robotics** – State Tournament Champion and Two-Time World Championships Competitor 2016, 2017

Leadership Experience

Publicity Chair and Webmaster – UCSB IEEE Student Branch, Santa Barbara, CA May 2018 – Present

- Designed a new Jekyll-based website, complete with store, member database, and more (see Projects above).
- Design posters for organization events, manage scheduling of projects and office hours, and maintain social media.

President, Vice President, and Treasurer – DVHS Robotics, San Ramon, CA. Aug 2015 – Jun 2017

- Hosted 11 tournaments in Northern California, including three by Google and two state championships.
- Reduced student cost for our largest World Championships trip (serving 60 people) by \$200 per person.

Fundraising Committee Leader and Librarian - DVHS Band Council, San Ramon, CA. Sep 2014 – Jun 2017

- Coordinated switch to paperless ticketing for a school dance by creating a mobile ticket scanner (see Projects above).
- Created point-of-sale for our annual candy bar fundraiser to simplify checkout, increasing profits by 150% compared to previous year (see Projects above).
- Cataloged, reorganized, and managed distribution of music in our music library.