

Donggun Lee (Billy)

Los Angeles, CA | P: (562) 278-7869 | E: ldgbilly@gmail.com | L: linkedin.com/in/dgunlee | **Active Secret Clearance**

EDUCATION

University of Southern California, Viterbi School of Engineering | GPA: 3.71

Los Angeles, CA

B.S. Computer Science

Expected: May 2025

Related Coursework: Data Structures, Embedded Systems, Algorithms, Full-Stack Web Dev, Intro to Info Security

EXPERIENCE

Fluxfort Technologies

Cypress, CA

Embedded Systems Engineering Intern

August 2023-Present

- Implement embedded systems architecture and HMI of a circulator pump system using Arduino IDE and Nextion
- Conduct comprehensive testing on printed circuit boards and functionality of centrifugal pumps to validate reliability

World War II Camp Wall Committee

Los Angeles, CA (Remote)

Software Engineering Intern

June 2023-July 2023

- Set up comprehensive SQL database for names of 120,000+ Japanese-Americans incarcerated during World War II
- Developed name spacing calculation algorithm for names to be engraved on granite walls for memorial monument
- Used Jira, Bitbucket, and Scrum framework for development process and Tableau for creating data visualization

USC Institute for Creative Technologies

Los Angeles, CA

Undergraduate Research Assistant

September 2022-May 2023

- Participated in *Semantic Terrain Points Labeling System Plus*, generating photogrammetry point clouds data
- Annotated object movement tracks in 2D aerial videos using Computer Vision Annotation Tool
- Trained AI through machine learning algorithm with skeleton based action recognition using PYSKL toolbox

United States Army

Camp Carroll, South Korea

Equipment Records Parts Specialist

September 2018-January 2022

- Led 6 soldiers as a team leader and directly supervised team's soldier development, fitness, and duty responsibilities
- Oversaw requisition and disposal of military vehicle repair parts and consumables, saving \$20,000 of unit fund
- Processed over 20 military vehicle dispatches weekly and maintained service information of 200 military equipment

PROJECTS

Name Spacing Visualization, HTML/CSS, JavaScript

- Used HTML/CSS and JavaScript to resemble what it would look like to have names engraved on the memorial wall
- Implemented the visualization with different dimensions incorporating line spacings, font sizes, and font types

Bitcoin Trade Program, Python

- Designed Bitcoin trading simulation program using real-time prices through *requests* package and API
- Utilized *If This Then That* applet to send smartphone notification of trade details in an event of purchase or sale

E-Commerce Store with Terminal UI, C++

- Developed a simplified version of online retail system enabling the users to search, cart, and purchase items
- Incorporated maps, sets, and queues for keyword search and to update user and product information in database

Stopwatch on LCD, Arduino UNO, C

- Designed stopwatch software on LCD shield of Arduino Uno and simple circuits with start/stop and lap/reset buttons
- Implemented ISR and state machine model to accurately send data nibbles to LCD with button presses

INVOLVEMENT

USC Association for Computing Machinery 2022-present; USC Veterans Association 2022-present; USC Autonomous Underwater Vehicle Team 2023-present; Korean-American Scientists and Engineers Association 2022-present;

LANGUAGES AND TECHNOLOGIES

- C/C++, Python, Java, Arduino, HTML/CSS, Bootstrap, JavaScript, Linux, Git, Jira, Scrum Methodology, Korean