

DAVID SONG

han02bit18@gmail.com | (669) 236-1331 | linkedin.com/in/davidthesong | github.com/hanbit0218

EDUCATION

San José State University

B.S., Computer Science | GPA: 3.52

San José, CA

Expected May 2025

- **Relevant Coursework:** Data Structures and Algorithms, Object-Oriented Design, Computer Systems, Data Analysis, Data Visualization, Operating Systems, Information Security, Formal Languages and Computability

SKILLS

- **Languages:** Java, Python, C, SQL, JavaScript, HTML, CSS, MIPS Assembly
- **Developer Tools:** Visual Studio Code, Eclipse, IntelliJ, Blue-J, Google Colab, CLion, Ubuntu
- **Technologies / Frameworks / Libraries:** Git, Github, Jupyter, Node.js, Next.js, React

PROJECTS

Energy Dashboard | https://github.com/hanbit0218/energy_dashboard.git

Nov 2023 - Dec 2023

- Leveraged SQL and Python to create a user-friendly, interactive dashboard
- Presented and analyzed a robust dataset comprising over 3000 entries, offering insightful visualizations of global energy usage patterns and predictive models forecasting future trends over the next decade
- Utilized Pandas, NumPy, and Panel for data manipulation and visualization

HydroSense | <https://github.com/hanbit0218/HydroSense.git>

Oct 2023 - Nov 2023

- Developed a device capable of measuring soil moisture levels and transmitting this data to a web application for user analysis with an accuracy rate of approximately 80%
- Created the project's front end, taking the lead on the frontend team of 5 other members to design and implement the user interface and user experience functionalities over 5 weeks
- Implemented the routing and layout of all the pages on the website

Simulation Station | <https://github.com/hanbit0218/MVC-Apps.git>

Apr 2023

- Developed 4 diverse scenario simulations, encompassing both realistic and fictional settings such as a prison, a plague outbreak, animals flocking, and a bustling street of commuters
- Organized the user interface buttons and designing a user-friendly layout to implement the functionality of buttons, ensuring an engaging and interactive user experience
- Applied the MVC (Model-View-Controller) pattern to successfully deliver the Simulation Station project, featuring 4 captivating and responsive scenario simulations

LEADERSHIP EXPERIENCE

Frontend Lead, Theta Tau - Professional Engineering Fraternity

Sep 2023 - Nov 2023

- Led the training of the frontend team on essential tools including Git, Github, Figma, ReactJS, and Next.js
- Provided comprehensive education on frontend development languages such as JavaScript, CSS, and Tailwind CSS to enhance the team's skill set
- Added crucial features on the HydroSense website such as the seamless data transfer between Firebase and spreadsheets

Academic Chair, Theta Tau - Professional Engineering Fraternity

Sep 2023 - Nov 2023

- Advised and mentored over 5 Potential New Members (PNMs) of Theta Tau in Java, Python, and other Computer Science subjects
- Instructed PNMs on complex programming concepts like recursion and dynamic programming, supporting their preparation for Data Structures and Algorithms coursework
- Coordinated and hosted workshops aimed at refining professional skills such as writing, speaking, and networking, achieving a 90% attendance rate

Project and Development Lead, Academy of Music and Art for Special Education

Aug 2017 - May 2021

- Orchestrated two gala concerts and three exhibitions in Cupertino and San Diego, showcasing projects with a 90% turnout for both staff and students
- Initiated the development and completion of 30+ art projects annually
- Facilitated the setup of showcases for the team's projects and actively contributed to the organization of concerts