

Minkyung (Kelly) Kim

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EDUCATION

University of California, Irvine

Bachelor of Science in Computer Science

Information Specialization, Minor in Informatics

Expected Graduation Date: June 2025

GPA: 3.8 / 4.0

SKILLS

Programming Languages: HTML, CSS, Figma, JavaScript, Python, Java, SQLite, C++, C, MySQL, Git

Frameworks and Tools: Bootstrap, React, Angular, Ionic, AWS, Docker, Kubernetes

Concepts: Virtual Memory, Network Programming, AI, Web Development, Data Structures and Implementation, Algorithms

PROJECTS

Step Counter

Irvine, CA

C, Bluetooth, accelerometer

Nov 2024

- Designed a step counter system using the ESP32 board and an accelerometer to accurately measure steps and transmit data to a phone via Bluetooth
- Programmed software to continuously analyze data from the accelerometer sensor, detecting changes in the y-axis above a defined threshold to increment the step count
- Devised the integration of the ESP32 board with an iPhone using Bluetooth connection, enabling real-time transfer and display of step counts on the phone

Highway Traffic Light

Irvine, CA

C, LED, ESP32, buzzer, button

Oct 2024

- Designed and implemented a simplified traffic light controller using the ESP32 board, integrating sensors such as LEDs, a buzzer, and a button to enhance functionality and accessibility
- Developed software to accurately regulate the time and status of LEDs, ensuring precise light transitions: yellow and red-yellow for 2 seconds, red for 10 seconds, and green for a minimum of 5 seconds after button activation
- Optimized accessibility features by incorporating a buzzer system to assist visually impaired individuals in recognizing green and red lights effectively

Fabflix

Irvine, CA

HTML, CSS, JS, Java

Apr 2024 - Jun 2024

- Developed and deployed a robust movie website enabling full-text search, auto-correct, and search by title, year, director, and star name. Implemented features such as adding movies to a shopping cart, processing payments, and displaying a confirmation page post-payment
- Optimized front-end and back-end interaction by using session storage to limit server call frequency for auto-correct functionality, preventing unnecessary server load and ensuring efficient website performance. This approach allowed repeated searches to retrieve data from session storage instead of making additional server calls
- Ensured secure and scalable deployment by maintaining clear separation between front-end and back-end, utilizing prepared statements to prevent SQL injection, and deploying the website on AWS using a Tomcat server, Docker, Kubernetes cluster, and Google Cloud

Responsive Personal Portfolio Website

Irvine, CA

HTML, CSS, Bootstrap

Jan 2024

- Designed and developed a personal portfolio website to effectively showcase my experiences and demonstrate proficiency in basic front-end languages
- Utilized Bootstrap to manage complex website layouts, ensuring responsiveness and seamless adaptation to various screen sizes
- Integrated functionalities enabling viewers to download a PDF version of my resume and access my LinkedIn profile

Search Engine

Irvine, CA

Python

Jan 2024 - Mar 2024

- Constructed an inverted index to efficiently organize and store analyzed words from HTML pages according to their positions
- Computed cosine similarity between query terms and the inverted index to identify the most relevant matches for the query
- Developed a graphical user interface (GUI) to facilitate searching and displaying query results in a more user-friendly and intuitive format compared to terminal outputs

Virtual memory

Irvine, CA

Sep 2023 - Dec 2023

C

- Implemented virtual memory capable of executing commands such as read, write, showmain, and showtable
- Managed page faults and updated the virtual memory table, including data insertion and victim page replacement

Network Communication

Irvine, CA

Sep 2023 - Dec 2023

C

- Processed and archived data from CSV files on the server to optimize data accessibility and streamlining client request response times through enhanced database organization and retrieval strategies
- Constructed a socket connection to facilitate communication between the server and client for a stock market application
- Engineered server-side logic to handle client queries and compute maximum stock rates

LikeLion X UCI Official Website Hi-fi prototype

Irvine, CA

Jan 2023 - Apr 2023

Front-end

- Developed a community-driven website to share insights about campus life and provide guidance on managing classes at UCI
- Designed the website layout using Figma to plan and optimize page functionality and user interface elements visually
- Utilized React, HTML, and CSS to implement the pages and enable seamless navigation between them

LEADERSHIP EXPERIENCE

Women in Informatics and Computer Science (WICS)

Irvine, CA

Oct 2024 - present

Mentor

- Guided undergraduate students in exploring academic and career paths in computer science, offering personalized advice on course selection and research opportunities
- Facilitated professional growth by providing strategic guidance on technical resume building, networking, and career planning
- Organized and actively participated in regular meetings and events to foster a supportive and inclusive environment for women pursuing technology-related fields

Virtual Hackathon, Soma World By LIKELION

Irvine, CA

Jan 2024

Team Leader

- Spearheaded a high-impact team in a prestigious online hackathon hosted by Soma World, a virtual office platform renowned for fostering innovation and collaboration
- Orchestrated the team's strategic planning and execution, efficiently managing deadlines and delegating tasks to optimize productivity and ensure seamless project delivery
- Led the development of a cutting-edge website dedicated to searching for biosimilars, revolutionizing access to affordable medication, and addressing a critical need in the healthcare industry

LIKELION (LLUS) X UCI

Irvine, CA

Jun 2023 – Jun 2024

Vice-president

- Orchestrated membership recruitment and onboarding processes, encompassing application reviews, interviews, and orientations, to attract passionate and dedicated individuals aligned with the club's mission and values
- Arranged and led coding workshops, inviting industry professionals and guest speakers to share their expertise and insights, thereby providing club members with valuable learning opportunities and exposure to real-world coding applications
- Initiated and directed collaborative projects with club members to acquire hands-on experience through real-world projects, thereby advancing their professional development and career prospects

Executive Board Member

Jan 2023 - May 2023

- Fostered collaborative relationships with approximately 10 board members to strategically plan and orchestrate a diverse range of coding-centric events
- Established an educational environment that motivated club members to enhance their technical and networking skills
- Directed and led a LeetCode group, mentoring members through coding problems, and facilitated weekly study sessions to discuss problem-solving logic and strategies

Undeclared and Undecided Mentorship Program (UUMP)

Irvine, CA

Sep 2022 - Jun 2023

Mentor

- Synthesized communication skills to establish robust mentoring relationships and foster a culture of knowledge-sharing
- Organized regular meetings with mentees to monitor their academic progress, address concerns, and deliver personalized guidance
- Facilitated workshops and group discussions to equip mentees with essential skills for academic success and career planning