NICHOLAS Q. BUI

San Jose, CA

nicholasqbui@gmail.com ◇ linkedin.com/in/nickkbuii ◇ nickkbuii.github.io

EDUCATION

Independence High School - San Jose, CA   2019 - 2023
High School Diploma — Valedictorian — GPA: 4.4

- Relevant Coursework: Principles of Engineering, Introduction to CAD, Aerospace Engineering, AP Computer Science Principles, AP Computer Science A, AP Calculus AB/BC, AP Physics C: Mechanics
- Clubs/Organizations: Solar Suitcase (President), MESA (President), CS Club (Treasurer), Finance Club (VP)

University of California, Berkeley - Berkeley, CA   2023 - 2027
BS, Electrical Engineering and Computer Science

- Relevant Coursework: Structure and Interpretation of Computer Programs (CS 61A), Data Structures (CS 61B), Designing Information Devices and Systems I/II (EECS 16A/B)
- Clubs/Organizations: Space Enterprise at Berkeley, Combat Robotics at Berkeley, IEEE, Entrepreneurs at Berkeley, VSA

SKILLS

Software	Java, Python, C++, HTML/CSS, Git, Android Development, Google Firebase
Hardware	Microcontrollers, Autodesk Fusion, Altium, Circuit Design, Electronics Prototyping, 3D Modeling
Soft Skills	Leadership, Accountability, Communication, Time Management
Languages	English, Vietnamese, Spanish

EXPERIENCE

SIMR Bioengineering Intern   May 2022 - Aug 2022
Stanford University   *Palo Alto, CA*

- Designed, programmed, and prototyped the hardware and software for "Apnostics", a biometric sensor system for sleep apnea diagnosis using C++, Arduino, and Autodesk Fusion
- Ran extensive cross-comparison accuracy tests between our sensors and existing biometric sensors, ultimately achieving over 97% sensor accuracy
- Pitched our system to Stanford's bioengineering faculty at a poster symposium

PROJECTS

ASLens Built a robust machine learning-based ASL interpretation device using Autodesk Fusion, Raspberry Pi, OpenCV, and Python. Users can form ASL signs and the device uses LSTM neural networks and natural language processing to translate the signs into audible speech. The project won 4th place at the 2023 MESA National Engineering Design Competition.

Emoticam Developed an accessible, hands-free, digital communication tool using OpenCV and Python to convert hand gestures and facial expressions into corresponding emojis and keyboard characters. The project won 1st place at the 2022 Los Altos Hackathon, qualifying me for Pinnacle 2023, the Olympics of Hackathons.

FinanceLingo Created a beginner-friendly financial education mobile app using Java, Android Studio, and Google Firebase. Users can learn about personal finance through fun and interactive activities while their progress is stored and accessed in real-time through a cloud database. The project was submitted to the 2022 Congressional App Challenge for CA-17 and was awarded the Certificate of Special Congressional Recognition by Rep. Ro Khanna.