ingarobotics.com | ing4@berkeley.edu | 949-522-2890

EDUCATION

UC BERKELEY

B.S. IN ELECTRICAL ENGINEERING & COMPUTER SCIENCE

Expected May 2024 | Berkeley, CA

LINKS

Website:// ingarobotics.com LinkedIn:// inga-zhuravleva Devpost:// izhuravleva Github:// ingazhur

COURSEWORK

Digital Design and Integrated Circuits (EECS 151 - ASIC/FPGA design) Microelectronic Devices Optimization Models in Engineering Computer Architecture Computer Security

GROUPS & ACTIVITIES

Berkeley Speech Group at BAIR (advised by Prof. Anumanchipalli) ML@Berkeley (External Team Officer) Neurotech@Berkeley (Devices Lead) Cal Hacks (Hackathon Organizer)

TEACHING

EECS 16B Lab Assistant
(Fall 2021, Spring 2022)
Computer Science Mentors
(EECS 16A Mentor)
Code in Place (Stanford Engineering)
(Python Section Leader)

SKILLS

HARDWARE

Embedded systems, Verilog, analog front end (AFE) design, PCB design (schematics, layout, fab), communication protocols (including Bluetooth LE), Raspberry Pi, Arduino, Eagle, KiCAD, Cadence

SOFTWARE

Object-oriented programming, Embedded ML (TinyML), Python, C/C++, Web development, Flask, Linux, Git

EXPERIENCE

BERKELEY AI RESEARCH | UNDERGRADUATE RESEARCHER

Sept. 2022 - Present | Berkeley, CA

- · Advised by Prof. Anumanchipalli working on BCIs for speech synthesis
- Developing an intelligibility assessment for decodings of a 3D avatar designed in Unreal Engine

AMAZON, LAB 126 | HARDWARE ENGINEERING INTERN

Jun. 2022 - Aug. 2022 | Sunnyvale, CA

- Designed a Raspberry Pi companion PCB for an automated and low-cost testing fixture for electrostatic discharge (ESD) events on the factory level
- Coordinated with a team of HW/EE engineers to manage hardware component libraries, board layout, and assembly

HUMM | Hardware/Software Engineering Intern

May 2021 - Aug. 2021 | Berkeley, CA

- Built Python GUI application on Raspberry Pi for simultaneous testing of 5K+ MCUs with automatic software updates
- Increased the output of testing system by 250%, leading directly to saved costs at contract manufacturer
- Migrated automated PCB testing platform (Python-based codebase) to a Linux based OS, reducing the hardware cost of each test system by 80%
- Brought up a Bluetooth emulator device via a Flask web application, defining FSM algorithm from scratch, allowing to decouple next generation wireless design from the current prototype in production

SELECTED PROJECTS

SIXT33N TO MARS | TI DESIGN CONTEST WINNER, SPRING 2021

 Built a voice-controlled car with a camera operated through a remote server (powered by Raspberry Pi) displaying temperature sensor data and camera livestream on a website (link to project)

NEUROTECH @ BERKELEY | DEVICES DIVISION LEAD

Feb. 2022 – Present | Berkeley, CA

- Built analog front end hardware and data collection software (Python-based) from scratch for an eye tracking device for a desktop-based game controlled hands-free with eye movements
- Wrote technical specification for next version of the eye tracking device, documented past projects

CANSAT ROCKET PAYLOAD DEVELOPMENT | TEAM LEADER,

ELECTRONICS ENGINEER, 1ST PLACE IN A NATIONAL COMPETITION Sep. 2015 – Aug. 2018

- Programmed a camera for custom-made spectrometer; analyzed and presented received pictures of spectral lines using Python data visualization libraries (link to portfolio)
- · Designed, assembled, and programmed a PCB for measuring soil resistance