Vanessa Fang

New York City, NY | vf72@cornell.edu | linkedin.com/in/vanessafang/

OBJECTIVE

Upcoming Computer Science graduate looking to apply Python, Java, and web/mobile-specific language skills towards a full-time Software and Mobile Engineering position.

EDUCATION

Cornell University - College of Engineering (Jacobs Scholar) **Ithaca, NY**
B.S. Computer Science | Minor in Electrical and Computer Engineering May 2025 (Expected)

SKILLS

Languages: Python, Java, Kotlin, Verilog, C, C++, JavaScript, TypeScript, HTML/CSS, SQL, Dart, OCaml
Libraries: React, RISC-V, Flutter, NumPy, Node.js, Express.js, Jetpack Compose, PyTorch
Tools: Git, FPGA, Linux/Unix, Raspberry Pi, Firebase, Intel Quartus Prime, Charles Proxy, Launch Darkly

RELEVANT COURSEWORK

Machine & Robot Learning, Computer Networks, Computer Architecture (Verilog), Embedded (C) & Operating Systems, Algorithms (Java), Data Structures, Object-Oriented (Java) & Functional Programming (OCaml)

PROFESSIONAL EXPERIENCE

Fidelity Investments **Merrimack, NH**
Software Engineer Intern (Mobile) *Jun. 2024 - Aug. 2024*

- Reduced call volumes by replacing a generic error screen with 3 new, user-friendly screens, enhancing customer self-service during the log-in process, and significantly improved team KPIs
- Made network calls to REST APIs in the domain layer to request OTPs via phone when carriers are down and utilized Charles Proxy to rewrite responses to test and debug API calls efficiently
- Collaborated in an agile team to develop a new feature epic while following CI/CD pipeline and Git Workflow, applying Kotlin coroutines, Jetpack Compose, ViewModel architecture, and Launch Darkly

Nouveau Elevator **Long Island City, NY**
Jr. Code Compliance and Testing Coordinator *Jul. 2023 - Aug. 2023*

- Assisted elevator technicians in analyzing elevator circuits, engines, and system schematics to resolve technical issues related to motors, controllers, doors, and safety systems
- Built and assembled elevator components according to system schematics and verified wire connectivity through thorough testing, ensuring a 100% functionality rate

Space Systems Design Studio - Cislunar Explorers **Ithaca, NY**
Flight Software Architect *Jan. 2023 - May 2023*

- Designed a new flight software architecture with a pipelined datapath in Python adhering to NASA flight guidelines using water electrolysis and optical navigation
- Accomplished an improved efficiency and reliability of spacecraft operations by 40%

LEADERSHIP

Teaching Assistant @ Cornell Electrical and Computer Engineering **Ithaca, NY**
ECE 5725 - Embedded Operating Systems *Jan. 2024 - Present*

- Resolved operating system issues in student projects, reconfigured hardware connections with external devices, and assessed code clarity and lab reports to ensure students' understanding of embedded OS

ECE 2300 - Digital Logic and Computer Organization *Aug. 2023 - May 2024*

- Facilitated weekly lab sessions to design and implement microprocessors in Verilog with 139 students and held weekly office hours to further students' understanding of circuits and computer organization

PROJECT

GestureHome - Used Python and OpenCV to develop hand gesture recognition to control 3 home systems on the RPi, enabling pipelined and synchronized control of multiple devices for a smooth user experience