EZRA KANG

155 Bay State Rd, Boston, Massachusetts 02215

760-289-9174 ⋄ ehk@mit.edu ⋄ ezrakang.dev

EDUCATION

Massachusetts Institute of Technology (MIT) GPA: 4.7   Cambridge, MA
Candidate for Bachelor of Science in **Electrical Engineering and Computer Science**   May 2024
Coursework Includes: **Hardware Architectire for Deep Learning, Computer Architecture, Digital Systems, Computer Systems Security, Nanoelectronics, Operating Systems, Algorithms, Fundamentals of Programming, Linear Algebra, Machine Learning, Discrete Math, Circuits and Electronics, Differential Equations**

WORK/PROJECT EXPERIENCE

LEAN Research Group   Undergraduate Researcher | Cambridge, MA | 05/23 - Current

- Improved an FPGA development platform that facilitates the development and testing of LEAN's in-house SoC design and algorithms
- Developed an application in C++ that showcases the communication of an FPGA board connected to a host workstation via PCIe in order to demonstrate the performance of a novel algorithm
- Ported an RTOS application in C++ to a RISC-V based SoC to investigate the trade-offs of using a real-time OS versus a regular OS

6.192/6.205   Computer Architecture/Digital Systems Class | Cambridge, MA | 02/22 - 12/22

- Created a 3D graphics rendering pipeline in RTL for the Nexys 4 FPGA board in SystemVerilog
- Developed projects for an FPGA board in SystemVerilog involving video/audio transfer and I/O handling, with test benches for verifying functionality
- Designed a superscalar CPU on the RISC-V ISA in Bluespec with caching and pipelining

Zoro   Software Engineer Intern | Chicago, IL | 06/22 - 08/22

- Designed and developed web frontends built in Vue to provide a user friendly UI for backend tools used by non-technical teams
- Improved a backend API utilizing Python with Flask to facilitate an efficient method of updating database information
- Worked within an Agile development team to develop internal tools with the purpose of improving the workflow of other teams within the company

FLI@MIT Committee   Co-Chair of Peer Support Committee | Cambridge, MA | 02/21 - 01/22

- Led a committee to create projects to better support FLI (First-Gen/Low-Income) students at MIT
- Communicated with core leadership to report on project details and generate deliverables
- Delegated tasks to committee members and assisted in their execution

TECHNICAL SKILLS

Programming	C/C++, Python, SystemVerilog, Bluespec, Flask, Vue, RISC-V, Javascript, Pytorch
Skills	Computer Architecture, OS, Data Structures, Algorithms, OOP, Digital Design, Probability
Tools	Visual Studio Code, Linux, Git, Bitbucket, Jenkins, Docker, GCP, Vim, Jira