Son Tran

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EDUCATION

University of California, Berkeley – Expected Graduation: Dec 2020

Berkeley, CA

Bachelor of Science in Electrical Engineering and Computer Science; GPA: 3.925

Aug 2018 - Present

- $\circ\,$ Honors: HKN-IEEE Honors Society Member Selected as top 25% of junior-standing EECS students by GPA
- o CS Coursework: Data Structures, Algorithms, Artificial Intelligence, Convex Optimization
- EE Coursework: Machine Structures, Designing Information Systems, Signals and Systems, Robotics

Relevant Experience

Computer Science Mentors Group

Berkeley, CA

Jan 2019 - Present

Electrical Engineering Mentor

- \circ Working with 5+ senior mentors to create new worksheets and help 5+ junior mentors in teaching
- o Taught electrical engineering materials to 4+ students in a small group discussion
- Prepared 50+ lectures and notes for my discussions

UC Berkeley Electrical Engineering and Computer Sciences

Berkeley, CA

Academic Intern for CS 61A

Jan 2019 - May 2019

- \circ Supported 30+ CS 61A's student in labs and office hours each week
- Guided students through programming paradigms including procedural programming (Python), functional programming (Scheme), and declarative programming (SQL) by lecturing and solving sample exam-level questions

NASA Jet Propulsion Laboratory (JPL), California Institute of Technology

Pasadena, CA

Student Independent Research Intern Program

Feb 2018 - May 2018

 Used Kafka Streams framework and Java to implement a streaming application that can process real-time data collected from the Deep Space Network

RESEARCH EXPERIENCE

UC Berkeley Electrical Engineering and Computer Sciences, SWARM Lab

Berkeley, CA

Undergraduate Research

May 2019 - Present

- Supporting graduate students design and test micro jumping and swimming robots
- Developing and testing novel electrostatic rotational gap-closing actuators and micro-motors

California State University, Fullerton

Fullerton, CA

Undergraduate Research Experience

Jun 2018 - Aug 2018

• Used Apache Spark running on Hadoop to implement and test different multi-class classification algorithms

Projects

CPU

Designer and Maker

- \circ Designed and implemented a 32-bit two-cycle processor using Logism based on RISC-V
- o Used only logic gates and basic circuit elements such as multiplexers to build an arithmetic logic unit and a control unit
- o Implemented a two-stage pipeline by adding necessary registers

Deep Space

Designer and Programmer

- o Designed and implemented a 2D tile-based world exploration game
- Used graphical and text-based tiles to generate a world that users can explore by walking around and interacting with objects in that world
- o Developed an algorithm that randomly generates connected rooms in a maze for each level of the game

SKILLS

- $\bullet \ \ \textbf{Programming Languages} : \ \ \text{Java}, \ \ \text{Python}, \ \ \text{C++/C}, \ \ \text{SQL}, \ \ \text{Scala}, \ \ \text{JavaScript}, \ \ \text{bash (shell scripting)}, \ \ \text{PHP}$
- Technologies: NumPy, SciPy, UNIX (Linux, macOS), Git, Apache Spark, Apache Hadoop, Apache Kafka

EXTRACURRICULAR ACTIVITIES

Electrical and Computer Engineering honor society

Berkeley, CA

Member

Feb 2019 - Present

 $\circ\,$ Helped to prepare materials for a DeCal class, Going Down the EECS Stack