GEORGIA SHAY

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EDUCATION

Massachusetts Institute of Technology (MIT) *May 2023*
Master's of Engineering Candidate, Electrical Engineering and Computer Science

Massachusetts Institute of Technology (MIT) *May 2022*
B.S. Electrical Engineering and Computer Science
Relevant Coursework: Computer architecture, computer systems security, hardware security, circuit analysis, software development, algorithms, power electronics, nanoelectronics, computer graphics

EXPERIENCE

Intern, Cascodium *Jun 2022 – Aug 2022*

- Added features and fixed bugs on an embedded system in C, and a corresponding GUI in C++
- Redesigned a PCB for a measurement device to improve accuracy
- Researched algorithms for a signal processing task and simulated the effect of noise, frequency, and other parameters on their results to compare different methods

Integration Engineer Intern, Apple *Jun 2021 – Aug 2021*

- Set up a clock domain crossing check flow and worked with designers to apply valid constraints to signals
- Set up synthesis flow to run automatically and send the most important information to designers by email. Set up tracking for important metrics over time

Design Verification Intern, Apple *Jun 2020 – Aug 2020*

- Upgraded a set of test components, porting customized features to a new design framework
- Implemented a new feature in a testbench reference model to match the design, providing random stimulus to achieve good coverage of usage scenarios
- Improved test-bench build flow by adding a pre-submission check of autogenerated files

Intern, Bridgestone Americas *Jun 2019 – Aug 2019*

- Facilitated a fivefold speed increase in database serialization through caching and refactoring
- Optimized an intersection algorithm by five times using short-circuiting and array programming

Intern, Bridgestone Americas *Jun 2018 – Aug 2018*

- Wrote Python code to populate, update, and extract engineering test data via a GUI
- Analyzed signal data with mathematical transforms, relating results to real world conditions

ACTIVITIES

Student Information Processing Board (SIPB) *Sep 2018 – May 2023*

- Created a website to track attendance and contributions using python Flask
- Developed a student-run degree planning application to help students choose classes in VueJS

UROP Research in Geometric Data Processing Group *Sep 2021 – May 2022*

- Performed survey of current mesh parameterization techniques
- Constructed a dataset of meshes and created a benchmark to evaluate parameterization methods

SKILLS

Computer Software/Tools: SolidWorks, Altium, Git, Jira, UVM, SQL
Computer Languages: Python, C, C++, Visual Basic, JavaScript (Node, Vue), Java, SystemVerilog, Verilog
EECS Skills: Embedded Systems, Signal Processing, Hardware Design Integration & Verification