Maximilian Tiao

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WORK EXPERIENCE

UCSC - Micro Architecture at Santa Cruz   *Jun 2020 – Present*
Undergraduate Researcher for LiveHD   *Santa Cruz, CA*
- Formulate and write algorithms for semantic and miscellaneous checks on LNAST, a high-level intermediate representation (IR) used to bridge different Hardware Description Languages (HDLs) and High-Level Synthesis (HLS) into LiveHD
- Revise LNAST API Documentation with more detailed explanations of LNAST operations using Graphviz, a graph visualization software, and document usage of semantic and miscellaneous checks
- Gave a talk at UCSC's CROSS Research Symposium about LNAST semantic and miscellaneous checks

UCSC - Jack Baskin School of Engineering   *Jan 2020 – Mar 2020*
Undergraduate Tutor   *Santa Cruz, CA*
- Attended lab sections to assist students with course concepts and develop strategies for understanding and completing programming assignments
- Participated in code review and critique on student work and progress
- Hosted weekly office hours to accommodate additional aid for students

UCSC - WikiTrust 2.0   *Oct 2019 – Mar 2020*
Undergraduate Researcher for WikiTrust 2.0   *Santa Cruz, CA*
- Customized a UI/UX interface for Wikipedia articles using bookmarklets, a bookmark that contains JavaScript commands to modify webpages, and host bookmarklet source code from a GitHub repository
- Implemented bookmarklet features to include color indicators and tooltips at each paragraph of Wikipedia articles to provide users with information such a trust level, author trust, and revision details
- Collaborated with UI/UX team to discuss and present interface designs to the research advisor

Allerio   *Jun 2019 – Sep 2019*
Web Developer   *San Francisco, CA*
- Led and contributed to the development of a responsive and interactive website skeleton with a unique homepage and 9 templated sections using HTML, CSS, and JavaScript
- Recommended and initiated website layout to allow for a wide range of viewability across 8 different device resolutions for both landscape and portrait orientations
- Coordinated weekly discussions with company founder and development team

EDUCATION

University of California, Santa Cruz   *Santa Cruz, CA*
Bachelor of Science, Computer Engineering; GPA: 3.9 / 4.0   *September 2018 - Present*
Dean's List (2019, 2020)

SKILLS

Programming: C/C++, Assembly (MIPS, RISC-V), Python 3, SQL, HTML/CSS, Basic JavaScript, Basic Verilog
Coursework: Algorithms and Data Structures, Computer Architecture, Logic Design
Others: Survey Research

PROJECTS

Side Programming Projects
- Build and write programs in C++ and Python to explore databases, data structures, and web scraping
- Projects include a student directory, a simple banking system, a To-Do list, web scrapers, and a Tic-Tac-Toe game