# Daniel Okazaki

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Github: https://www.github.com/dtokazaki
Website: http://students.engr.scu.edu/~dokazaki/portfolio/
Santa Clara, CA

EDUCATION Santa Clara University, Santa Clara

Master of Science (M.S), Computer Science and Engineering

Expected June 2020 GPA: 3.6/4.0

Santa Clara University, Santa Clara

Bachelor of Science (B.S), Computer Science and Engineering

June 2019 GPA: 3.3/4.0

TECHNICAL SKILLS

Languages: C, C++, Python, SQL, Java Operating Systems: Windows, Mac, Linux

Tools/Framework: AWS(Lambda, DynamoDB, and API Gateway), SPDK, Docker, Jensen, Git,

Jira

Familiar: Javascript, HTML, CSS, ARM/Intel Assembly, RISC-V

General: Compilers, Architecture, Algorithms, Data Structures, Object Oriented Programming,

Artificial Intelligence, Database Systems

EXPERIENCE

Platforms Firmware Engineer Intern Western Digital June 2019 - Current

western Digital

Volunteer STEM Instructor

April 2018 - June 2018

Kennedy Elementary School

Taught elementary students about Arduinos. Lessons based on basic circuit design and programming using the Snapino kit.

**PROJECTS** 

#### Blockchain Research

April 2019 - Present

Working with a team to create a flexible parameterizable Blockchain implementation, then iterating on top of it to make a custom Blockchain architecture that is in theory far more scalable than current implementations that are using proof of work and proof of stake. Implementation in Python.

#### **SQL JDBC Database Implementation**

January 2020 - March 2020

Implemented a SQL database using the Yelp Academic Dataset. Created a NetBeans application to interface with the database in order to show businesses and users through different categories. Dataset parser, database entry, and Netbeans application created in Java. Database initialized using SQL.

#### Compiler Optimizations

September 2019 - December 2019

Built a compiler in C++ that covers the Simple C syntax. After building the compiler, implemented the following optimizations: Constant Folding, Algebraic Simplifications, Local Value Numbering, Local Register Allocation, Dead Code Elimination, Copy Propagation, and Common Sub-expression Elimination.

#### NavSense

September 2018 - October 2019

Worked with a team to create a mobile assistive device for the visually impaired using machine learning for our Santa Clara University capstone project. Built using a Raspberry Pi 3B+ and Google Coral Accelerator. Paper published in IEEE.

- Awards: Computer Engineering Technical Excellence Award, Senior Design Presentation Award
- $\bullet$  Technology/Tools: Python, cv2, EdgeTPU API, Intel Movidius Neural Compute SDK
- $\bullet \ \ \mathbf{IEEE} \ \mathbf{Link} : \ \, \text{https://ieeexplore.ieee.org/document/9033125}$

### Bug Reporting System

Oct 2018 - Nov 2018

Worked with a team to create a bug tracking system for the Santa Clara University IT Department.

- Technology/Tools: HTML, JavaScript, CSS, AWS(Lambda, API Gateway, and DynamoDB)
- $\bullet \ \ \mathbf{Link} : \ \mathrm{https://github.com/dtokazaki/BugTracker}$

## Santa Clara University 2017 Hack for Humanity Finalist

March 2018

Worked together in a group to create a website that displayed the current bills and legislature passing through the California Government.

- Technology/Tools: HTML, CSS, Javascript, Web API
- Link: https://github.com/nsampemane/VoteCa

#### RELEVANT COURSES

- $\bullet \ \, \text{Advanced Compilers} \bullet \ \, \text{Advanced Architecture} \bullet \ \, \text{Software Ethics} \bullet \ \, \text{Internet of Things} \bullet \ \, \text{Artificial Intelligence} \bullet \ \, \text{Software Engineering} \bullet \ \, \text{Compilers} \bullet \ \, \text{Energy Efficient Computing} \bullet \ \, \text{Advanced Algorithms}$
- $\bullet$  Advanced Operating Systems (Linux)  $\bullet$  Discrete Math  $\bullet$  Computer Networks (TCP, UDP)
- Web Usability Advanced Data Structures Machine Learning Database Systems

# ADDITIONAL ACTIVITIES

- Member of Association for Computer Machinery
- Enthusiast Custom Computer Builder