Brett K. Saiki

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Summary

- Excellent student with critical thinking skills and a passion for learning
- Engaged in research on number systems, numerical analysis, and programming languages
- Able to work well in a team as well as independently
- Looking for an opportunity to apply my experience and learning in research or industry

Education

University of Washington   Computer Engineering
Expected graduation date: June 2023   GPA: **3.48**

Capistrano Valley High School   GPA (unweighted): **3.90**
2015 – 2019   GPA (weighted): **4.45**

Saddleback College   GPA: **4.00**
Summer 2017, Summer 2018

Experience

UW, Paul G. Allen School of CSE — Seattle, WA   December 2019 – present
Undergraduate Research Assistant

- Advised by Zachary Tatlock (UW) and Pavel Panchekha (U. of Utah)
- Herbie: state-of-the-art floating-point accuracy improver (PLDI '15)
- FPBench: community repository of floating-point benchmarks and FPCore compilers and tools (NSV '16)
- Expanded Herbie to support multi-precision expressions and improve expressions using precision tuning
- Added compilers from FPCore to common languages in FPBench
- Wrote research papers, gave talks at conferences

State Compensation Insurance Fund — Santa Ana, CA   June 2019 – August 2019
Summer Intern

- Contacted medical providers of injured workers to obtain work status updates
- Compiled unpaid bills from medical providers in preparation for litigation
- Indexed digital documents and digitized physical claims
- Learned the lifecycle of an insurance claim

Publications

Combining Precision Tuning and Rewriting
Brett Saiki, Oliver Flatt, Chandrakana Nandi, Pavel Panchekha, Zachary Tatlock
IEEE Symposium on Computer Arithmetic (ARITH) 2021

Achievements & Activities

UW Annual Dean's List   2020
UW PLSE (Programming Language and Software Engineering) Group   2019 – present

Skills

Microsoft Word, Excel, PowerPoint   C/C++, Java, Racket
Google Docs, Sheets, Slides   Linux, Git