

# Tai Danh

San Francisco, CA, 94117 | (559) 991-5997 | [danh.gg](http://danh.gg) | [taid100@gmail.com](mailto:taid100@gmail.com) | [GitHub@taidanh](https://github.com/taidanh) | [LinkedIn@taidanh](https://www.linkedin.com/in/taidanh)

## WORK EXPERIENCE

**University of California Santa Cruz, Santa Cruz** | Software Engineering Developer | 7/2021-PRESENT

- **Lead** development of custom apps using Laravel and Vue.js and retire old drupal apps
- **Maintain** live UCSC websites
- **Communicate** directly with clients to determine clear goals and needs
- **Learn** new technologies as responsibilities shift
- **Collaborate** with team on sprint goals and planning
- **Solve** new problems in a constantly changing environment

**Center for Research in Storage Systems, Santa Cruz** | Undergraduate Researcher | 6/2021 - 7/2021

- **Quintupled** performance of quality control code for steganographic kernel module/filesystem ([Artifice](#)).

## PROJECTS

**Website** | [taidanh/website](http://taidanh/website) | TypeScript, Vue.js

- **Developed** responsive personal portfolio using Vue.js, emphasizing software and personal achievements
- **Deployed** via AWS Amplify, integrating CloudFront for optimal content delivery.
- **Configured** SSL/TLS for custom domain and managed DNS migration from Namecheap to AWS
- **Troubleshoot** deployment issues, showcasing adaptability and problem-solving skills.

**Rex** | [taidanh/rex](http://taidanh/rex) | Rust

- **Collaborated** with partner to create this regex language with SQL-like syntax
- **Implemented** language with LALRPOP parser generator
- **Designed** and implemented regex backend with partner
- **Supports** basic regex operators

**C-Simple Compiler** | [taidanh/c-mini](http://taidanh/c-mini) ([rust version](#)) | Python/C++/Rust

- **Designed** tokenizer, parser, and AST from scratch
- **Lexes** code down to 3 address intermediate representation
- **Optimized** the compiler to output intermediate representation 2.2x faster than baseline
- **Translating** and adapting the compiler to Rust along with additional optimizations

## SKILLS

- **Most Familiar Languages** : TypeScript | PHP | C | Rust | Python
- **Familiar Languages** : SQL | Bash | Haskell | HTML/CSS
- **Frameworks** : Vue.js | Laravel | Bevy | LALRPOP
- **Personal** : Problem solver | Self-starter | Team player | Communication | Designer
- **Technical** : AWS | Git | Jira/Bitbucket | Linux/Unix | Terminal | Compilers | GDB | Valgrind | Documentation | Concurrency | Large codebases | Operating systems | Databases | Parser generators

## EDUCATION

**Computer Science**, June 2023 | University of California Santa Cruz, Santa Cruz

- **Relevant Classes** : Computer System Design | Compiler Design | Graduate level Compiler Design | Foundations of Programming Languages | Computer Graphics (web)