JadenGeller

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Skills

Programming
ADVANCED:
Swift • Objective-C • C • C++
SKILLED:
Haskell • Java • Python
JavaScript • SQL • Git
EXPERIENCED:
JavaScript • OCaml • Coq • Racket
Mathematica • x86 Assembly
INTERESTED:
Agda • Scala • Rust

Selected Coursework

Databases
Relational Databases
Database Implementation
Networking
Communication Networks
Network Structure Economics
Projects in Networking
Systems
Computing Systems
Operating Systems
Graphics
Computer Graphics
GPU Programming
Programming Langugages
Compiling Techniques
Types and Semantics
Other
Decidability and Tractability
Biomolecular Computation
Applied Machine Learning

Selected Projects

Token – PennApps Fall 2015
• Query financial data via natural language
• Awarded best iOS app by Apple and best use of API by Plaid

Helium – 2015
• Floating web browser for macOS
• Over 2k stars on GitHub and up-votes on Product Hunt

Compiler
• Designing and building a strongly-typed, low-level programming language in Swift

Education

California Institute of Technology
Computer Science B.S. Candidate
EXPECTED JUNE 2017

Work Experience

Realm | Cocoa Intern
SUMMER 2016
- Identified and fixed bugs, inconsistencies, and unsafe behavior in C++, Objective-C, and Swift codebases
- Designed and implemented thread-safe object handover API in Swift and Objective-C binding and in C++ object store
- Played role in migrating API and codebase from Swift 2 to Swift 3
- Investigated feasibility of pure-Objective-C Swift API via annotations and feasibility of pure-Swift Swift API via new language features
- Actively supported Realm users on GitHub and StackOverflow, answering questions, fixing bugs, and implementing features

Asana | Mobile + Security Intern
SUMMER 2015
- Improved quality and polish of iOS app, replacing subpar custom solutions with native components
- Actively took part in making cross-platform consistency, UX, and design decisions with the mobile team
- Played role in redesign, including majorly restructuring app UI and implementing novel "lava lamp" login view
- Prototyped split-screen iPad app with novel back stack behavior that matched web interface behavior
- Worked with the security team to close critical security flaws and implement improved server-side access control

Apple | iBooks Intern
SUMMER 2014 + PART TIME 2014–2015
- Designed, prototyped, and implemented a novel, fluid UX for consuming large, paneled content on small screens
- Researched and implemented content-analysis algorithms for retrofitting experience on existing content
- Collaborated with content specialist to determine potential necessary improvements to submit to the EPUB standard
- Collaborated with designers to fine-tune animation curve and visual effects
- Presented polished keynote outlining strategic and technical details to relevant members of iTunes store team and higher managers
- Listed as co-inventor on 3 (pending) patents related to the project

Caltech | Teaching Assistant
SPRING 2014, WINTER 2016, SPRING 2016
- Graded coursework and assisted students in C, OCaml, and Haskell, respectively