

Education

Rochester Institute of Technology
2013 - 2018

BS in Computer Science with a focus on programming languages and tooling.
Member of Computer Science House (<https://csh.rit.edu>)

Experience

Apple
2018 - present

Engineer on the Swift Compiler Frontend team. Currently working on a stable module format for the compiler.

Google
2018

Part-time remote contractor. Worked on an open-source Swift code formatting tool which aims to be the official formatter for Swift.

Apple
2017

Intern on the Swift Compiler Frontend team. Worked on C++ and Swift APIs for parsing and analyzing Swift files. My contributions were open source and developed entirely on GitHub.

Bryx
2013 - 2018

Lead iOS Developer working on Bryx 911, a cross-platform mobile app for Fire and EMS responders. Worked heavily with Swift, REST APIs, and MapKit. Used by hundreds of fire departments in the United States on a daily basis.

Apple
2016

Intern on the Swift Quality Engineering team. Worked on the code coverage infrastructure for the Swift programming language. My contributions were open source, and typically in Python, Swift, and C++.

Apple
2014

Intern on the HomeKit team. Created HomeKit Catalog, a developer sample code project that exercises the full HomeKit API on iOS 9. Worked heavily in both Objective-C and Swift.

Projects

Trill
<http://bit.ly/trill-lang>

A general purpose programming language that compiles to native code using LLVM. The compiler is written in Swift, and supports most features of C, with a much stricter static type system.

Silt
<http://bit.ly/silt-lang>

An in-progress, dependently typed language that intends to compile to native code using LLVM. The compiler is written in Swift and aims to be a fast, functional programming language with no garbage collection.

LLVMSwift
<http://bit.ly/llvmswift>

An open source library that wraps the LLVM API in a native Swift wrapper. Used as the code generation backend library for Trill and Silt.

Achievements

2018 Presented *Becoming an Effective Contributor to Swift* at AppBuilders 2018 in Lugano, Switzerland

2017 Presented *Improving Swift Tools with libSyntax* at try! Swift in New York City

2017 Presented *How to Clang your Dragon: Building a Compiler with LLVM* at PlaygroundsCon in Melbourne.

2014 Co-author on US Patent 20150350031 for HomeKit, owned by Apple, Inc.