Calvin Rose

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Computer Engineering student at Boston University, class of 2019. Loves to contribute to the open source community. Also loves to learn new languages and skills. Likes both high and low level programming, language and compiler design, hardware hacks, UI/UX design, computer graphics and game programming, Linux, and internet engineering. Has a fascination with Chinese culture, language, and food. Likes playing around with Lua and the LOVE game framework, and contributes back by creating FOSS libraries. Has profound respect for Roberto Ierusalimschy, the original author of the Lua language, and Mike Pall, the creator of LuaJIT.

🎓 EDUCATION

Boston University   2015-09 — Present
Bacheor's in Computer Engineering, Dean's List
3.67 GPA

★ PROJECTS

creator, dst   2017-01 — Present
A programming language that supports closures, macros, dynamic types, robust data structures, green threads (a.k.a fiber, coroutines, continuations, etc.) The language runs in a bytecode interpreter with garbage collection, integrated assembler, bytecode verification, and supports interop with C.

creator, Fennel   2016-01 — Present
A Lisp like language that compiles to Lua with no overhead or dependencies. Can be used as a standalone compiler or library.

creator, tiny-ecs   2016-01 — Present
A library for Lua that provides ECS (Entity Component Systems) for game programming.

creator, moonmint   2016-01 — Present
Express-like web framework that uses libuv and Lua's coroutines to enable a pleasant asynchronous progamming experience.

🏢 EMPLOYMENT

Developer, Covered Security   2016-06 — 2017-09
Intern at Covered Security, a fintech startup, for three summers. Worked on critical backend infrastructure as well as frontend design. Programming done mostly in JavaScript (Node.js on backend, Angular and Vue.js on frontend), but also some bash and python. Also work with the AWS platform, including elastic beanstalk, Dynamo DB, S3, and several other AWS services. Wrote abstraction layer for interfacing the Dynamo DB database, Domain Specific Language (DSL) for automating browsers, developer facing documentation, serverless analytics portal, and more.

Teaching Instructor, Boston University   2017-01 — 2017-05
Worked as a grader and teaching instructor for EC330, Data Structures and Algorithms at Boston University. Led discussions, helped students with homework, prepared quizzes, and wrote homework solutions.

</> SKILLS

Software Development	git Agile Testing Authoring Documentation Linux macOS
Dynamic Programming	Lua JavaScript Matlab
Functional Programming	Clojure ATS
Object Oriented Programming	Python Java C++ Swift Haxe
Low Level Programming	C GLSL Assembly (MIPS, x86) Verilog

👤 SERVICE

Volunteer, Global App Initiative   2015-01 — Present
Three years as a lead iOS developer at Global App Initiative, a non profit club at BU that makes mobile apps for non profits. Worked to develop the BU radio station app for iOS and Android, WTBU Radio. Managed team members, educated members about git,

programming, and the app design process, as well as worked with clients to help build better products.