

Education	Massachusetts Institute of Technology <i>Bachelors of Engineering in EECS</i> <ul style="list-style-type: none">› Technical GPA: 4.54› Coursework<ul style="list-style-type: none">Algorithms, Advanced Data Structures, Compilers, Operating Systems, Performance Engineering, Databases, Technical Communication› SaveTFP – President of Student Community Service Club› Varsity Athlete – Men’s Lightweight Crew Team	2015 – Present	
Experience	Broadway Technology <ul style="list-style-type: none">› Developed backend for new financial instrument on a platform connecting different types of financial institutions› Profiled, benchmarked, and tested optimizations in C++ codebase Ab Initio <ul style="list-style-type: none">› Added new frontend to data flow graph compiler› Developed new optimizations within an existing compiler framework› Developed, found bugs, and extended tests in large C++ codebase MIT Lincoln Laboratory <ul style="list-style-type: none">› Performed research in reverse engineering and simulating PowerPC Linux wireless access point Touchplan.io <ul style="list-style-type: none">› Implemented high-availability, online upgrading, and improved cooperative features for a Java and PostgreSQL backend server with Apache Mesos and ZooKeeper› Helped introduce continuous delivery systems using Atlassian Pipelines› Performed data analytics using PostgreSQL and Domo.com	Summer 2018 Summer 2017 Fall 2016 Summer 2016	
Projects	DenuoCC <ul style="list-style-type: none">› Work-in-progress C compiler› Extensive unit-testing framework RADS <ul style="list-style-type: none">› Implementation of advanced data structures and algorithms for class› Vector with sublinear insertion, several different heaps, cache-oblivious sorting algorithm MITscript <ul style="list-style-type: none">› Implementation of dynamic language for compilers class› Mark-sweep GC and JIT compiler using LLVM Denuos <ul style="list-style-type: none">› Toy x86-64 operating system learning experiment› Basic virtual memory, interrupt, and syscall interface LBI <ul style="list-style-type: none">› Basic implementation of the Lua virtual machine› Accurately emulates nearly all valid Lua bytecode sequences MODS <ul style="list-style-type: none">› Assembler for Lua bytecode format› Syntax permits labels and instruction-like macros	github.com/JustAPerson/denuocc github.com/JustAPerson/rads github.com/JustAPerson/denuos github.com/JustAPerson/lbi github.com/JustAPerson/mods	Rust 2019 Rust 2017 Rust 2017 Rust 2016 Lua 2013 Lua 2011
Skills	Programming Experience <ul style="list-style-type: none">› Languages: C, C++, Python, Java, PostgreSQL, Rust, Lua, x86 Assembly› Tools: git, perforce, svn, make/cmake, gcc/clang, ld, gdb, vim/emacs, valgrind, perf› Operating Systems: Windows, Mac OS X, Ubuntu		