jason@jpriest.me
(210) 323 8821
github.com/JustAPerson

# Jason Priest

For more information on my projects and experience, visit https://jpriest.me/

## Education

**Massachusetts Institute of Technology** **2015 – 2019**

*Bachelors of Engineering in EECS – Incomplete*

- Technical GPA: 4.54
- Coursework
  Algorithms, Advanced Data Structures, Compilers, Operating Systems, Performance Engineering, Databases, Technical Communication
- SaveTFP – President of Student Community Service Club 2016 – 2019
- Varsity Athlete – Men's Lightweight Crew Team 2015 – 2016

## Experience

**MIT Lincoln Laboratory** **Fall 2019 – Present**

- Researcher on team developing secure operating system for a new tagged architecture
- Working on build system, system call/libc interface

**Broadway Technology** **Summer 2018**

- 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** **Summer 2017**

- 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** **Fall 2016**

- Performed research in reverse engineering and simulating PowerPC Linux wireless access point

**Touchplan.io** **Summer 2016**

- 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

## Projects

**DenuoCC** **Rust 2019**

- Work-in-progress C compiler (functional preprocessor, parser incomplete)
- Extensive unit-testing framework

**RADS** **Rust 2017**

- Implementation of advanced data structures and algorithms for class
- Vector with sublinear insertion, several different heaps, cache-oblivious sorting algorithm

**MITscript** **Rust 2017**

- Implementation of dynamic language for compilers class
- Mark-sweep GC and JIT compiler using LLVM

**Denuos** **Rust 2016**

- Toy x86-64 operating system learning experiment
- Basic virtual memory, interrupt, and syscall interface

**LBI** **Lua 2013**

- Basic implementation of the Lua virtual machine, in Lua
- Accurately emulates nearly all valid Lua bytecode sequences

**MODS** **Lua 2011**

- Assembler for Lua bytecode format
- Syntax permits labels and instruction-like macros

## Skills

**Programming Experience**

- 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