Jason Priest

jpriest@mit.edu
(210) 323-8821

Education

Massachusetts Institute of Technology — Cambridge, MA
Bachelors of Electrical Engineering and Computer Science — 2015--2019

- Undergraduate GPA: 4.57
- Relevant Coursework:
  - 6.828 Operating Systems
  - 6.035 Computer Languages and Compilers
  - 6.046 Design and Analysis of Algorithms
  - 6.851 Advanced Data Structures
- SaveTFP – Treasurer in student community service club
- Athlete – Men's Lightweight Crew (2015 – 2016)

Experience

Ab Initio — Lexington, MA
Software Engineer — Summer 2017

- Added new front-end to data flow graph compiler
- Developed new optimizations within an existing optimizer framework
- Developed, found bugs, and extended tests in large C++ codebase

MIT Lincoln Laboratory — Cambridge, MA
Software Engineer — Fall 2016

- Developed tools to expedite reverse engineering and emulating embedded systems by identifying key hardware features that require faithful recreation

MOCA Systems — Cambridge, MA
Software Engineer — Summer 2016

- Implemented high-availability, online upgrading, and improved cooperative features for a Java and PostgreSQL backend server cluster using Apache Mesos and Apache ZooKeeper
- Created an automated backend deployment system using Python and Atlassian Pipelines
- Performed data analytics using PostgreSQL and Domo.com

Projects

MITscript — Rust 2017

- Implementation of dynamic language for 6.035
- Mark-sweep GC and JIT compiler using LLVM

Denuos — Rust 2016

https://github.com/JustAPerson/denuos

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

LBI — Lua 2013

https://github.com/JustAPerson/lbi

- A basic implementation of the Lua Virtual Machine
- Accurately emulates nearly all valid Lua bytecode sequences
- Runs at 5% the speed of the official C implementation of the Lua VM

MODS — Lua 2011

https://github.com/JustAPerson/MODS

- Assembler for the bytecode format used in the Lua Virtual Machine
- Syntax permits labels and pseudo-instruction macros

Skills

Programming Experience

- Knowledge of x86/PowerPC Assembly, C, C++, Java, JavaScript, Lua, PostgreSQL, Python, Rust
- Experience using development related tools such as git, perforce, make, gcc/clang, ld, gdb, vim/emacs