# Luke Champine

978-914-0769 ● champl2@rpi.edu ● lukechampine.com ● github.com/lukechampine

## Education

**Rensselaer Polytechnic Institute** – Troy, NY
BS in Computer & Systems Engineering, 2011 – 2015 (GPA: 3.51)

*Recent courses:*   *Embedded Control*
*Computer Architecture, Networks, and Operating Systems*
*Algorithms and Data Structures*
*Computer Components and Operations*

## Experience

**Platform Mapping Engineering Intern – Akamai Technologies** – Cambridge, MA
May 2013 – August 2013

- Wrote scripts to automate release processes
- Integrated scripts with company's MySQL database
- Automatically generated and sent employee-specific reminder emails

**Presales Technical Support Intern – Kronos Incorporated** – Chelmsford, MA
June 2012 – August 2012

- Deployed and managed virtual machines used by the presales team
- Took the initiative to automate VM deployment and management
  - Result: faster deployment, fewer errors, and easier maintenance
- Provided technical support to Sales and Pre-Sales Engineers in the field

## Skills

GNU/Linux ■ ■ ■ ■ ☐
C ■ ■ ■ ■ ■
Perl ■ ■ ■ ■ ☐
Haskell ■ ■ ■ ☐ ☐

Other skills: JavaScript, Git, SQL, Go

## Interests

- GNU/Linux
- Functional Programming
- Open Source Software
- Compiler/Interpreter Design
- Computer Hardware

## Projects

MkvSynth – 2013-Present
*Designed, implemented, scrapped, and re-implemented an interpreter for a linear video editing scripting language*

- Researched compiler design, abstract parse trees, context-free grammars, and BNF notation
- Wrote an interpreter with Flex+Bison, capable of type inference, function composition, and recursion
- Integrated language with video processing filters via an extensible plugin system

High School Senior Project – 2011-2012
*Conceived, designed, developed and presented a microcontroller-based USB PC peripheral*

- Selected and purchased appropriate microcontroller, arcade joystick, and button array
- Soldered all connections for joystick, buttons and mode switch
- Documented and described the design and development of the system for project judges