Ross M. Bayer

ross.m.bayer@gmail.com

August 2012 - Present

EDUCATION Rochester Institute of Technology

> Major: B.S. Computer Science Expected Graduation: May 2017

TECHNICAL SKILLS

Proficient Languages: C, Go, Java, Python, Standard ML

Farmiliar Languages: Haskell, JavaScript, Prolog, Rust, Ruby, Scheme Operating Systems: Linux (Arch and Debian based), Mac OS X

Tools: Git, IATEX, Make, CMake, Regular Expressions, Finite Automata, Vim

EXPERIENCE

## Rochester Institute of Technology

February 2016 - Present

Reserach Assistant https://mlton.org

Re-implementing MLton's build system to support modern architectures and techniques and improving overall build quality. Switching from GNU Make and small number of handwritten build scripts to a CMake build system.

Hudl

June 2015 - December 2015

Software Development Intern

https://hudl.com

Sole developer on a mission critical application in Hudl's alerting pipeline. Created two open-source Go packages to interface with PagerDuty and Postmark's RESTful APIs.

## Rochester Institute of Technology

February 2015 - May 2015

Research Assistant https://mlton.org

Learning about the general structure and implementation strategies of compilers. Implementing a general-purpose annotation system for the MLton compiler.

## Personal Projects adhoc-prologmorphism

February 2016 - Present

Independent Study on Adhoc-Polymorphism

https://github.com/Rostepher/adhoc-prologmorphism

A collection of documents and interpreters from my independent study on Adhoc-Polymorphism in Hindley-Milner type systems.

brainfuck

December 2014 - Present

Optimizing Brainfuck Interpreter

https://github.com/Rostepher/brainfuck

An interpreter for the esoteric, turing complete programming language Brainfuck written in Rust, utilizing a number of optimization strategies to exponentially decrease the number of operations and subsequently the execution time of Brainfuck programs.

libstrcmp

June 2014 - December 2014

String Distance Metric C Library

https://github.com/Rostepher/libstrcmp

An optimized C library dedicated to fast implementations of various string distance and phonetic metrics used in natural language processing and fuzzy string matching.

mget

June 2014

Manga Scraping Ruby Utility

https://github.com/Rostepher/mget

A Ruby utility to scrape manga chapters from online sources and then packages each chapter in a cbz (comic book zip) archive.

Extracurricular Clubs & Activities

## Computer Science House (CSH)

https://csh.rit.edu

Alumni Memeber

A special interest house with a focus on project-based education in the field of computer science and its related sub-fields.