607-280-7096 Ithaca, NY, USA iconmaster5326@gmail.com

Joshua Robbins Software Engineer

GitHub: iconmaster5326 LinkedIn: robbinsjoshuad

SKILLS

Languages Assembly (x64, z80), C, C++, C, CSS, Dart, Haskell, HTML, Java, JavaScript, Lua, Python,

Scheme, TypeScript

Tools Angular, Apache Ant, CMake, Eclipse, Git, GitLab CI/CD, GNU Make, Gradle, JetBrains MPS,

NetBeans, SMT solvers (Z3, AltErgo, Why3), Unity, Unix, Visual Studio Code

Specialties binary rewriting, compiler construction, formal verification, IDE plugin development, programming

language design, static analysis

Communication English

PROJECT SUMMARY

Binary Gen MPS A language providing an aspect that allows you to generate binary files from concepts instead

of text files

Chronomancer Dart A website providing an interactive database with information from a video game

DataFormats MPS A language providing support for common data file formats

GTIRB C++, A format for storing information about binary files and related binary rewriting tools

Python

Why R C++ A formal verification engine for LLVM IR

RECENT WORK EXPERIENCE

Software Engineer II
Grammatech Inc

June 2019 — Present
Ithaca, NY, USA

• Engaged in three internships previous to employment producing

- Specifications for formal verification of C programs using libc
- Formal verification systems for multiple languages
- Frameworks to modernize code in Grammatech's core product, CodeSonar
- Developing automatic binary and source code rewriting solutions
- Improving production-readiness of academic projects
- Helping fulfill multiple government contracts

EDUCATION

Bachelor of Computer Science, Rochester Institute of Technology
Master of Computer Science, Rochester Institute of Technology

April 2019

April 2019

Hobbies

creative writing, hiking, tabletop RPGs, trading card games, video game design/development