Alex M. Harry

Computer engineer with a strong mathematics background. Skilled at embedded programming with experience working for Northrop Grumman on hardware security. Seeking an entry-level position as [role name here]

EDUCATION

Rochester Institute of Technology *2019-2024*

Double Degree BS: Computer Engineering & Computational Mathematics

Courses

- Memory Centric Computing
- Interface and Digital Electronics
- Graph Theory
- Mathematical Modeling

Key Projects

- **n-Dimension Optimization** Written with CUDA GPU speedup in C++ to find global max/min on a domain of data points using least square regression, Gröbner basis, and eigenvalues of the companion matrix to solve a system of n-dimensional polynomials
- **Soft MIPS** 5 stage pipelined processor in VHDL and a Java MIPS32 compiler
- **SPICE Based PIM Architecture** LUT processor in memory architecture based on pLUTo and FlutPIM using LTSPICE

WORK HISTORY

Northrop Grumman Systems Engineer | Aviation Blvd, Baltimore, MD
01/22 - 08/22

Key Projects

- **NG SecMon** Northrop Grumman VHDL hardware security logic used to monitor all native security channels while supporting additional subsystems on AHB
- **NIST Cybersecurity Mapping Interface** Interactive CERT and NIST documentation webpage for source code vulnerability checkers

Startup Accelerator Founder | Reynolds Dr, Rochester, NY
05/23 - 08/23

Key Projects

- **C++ Render Engine** Render engine supporting OBJ file reading using SDL library with C++ object oriented hierarchy

Contact

LinkedIn
amh1360@rit.edu
github.com/AlexHarryMimir

Skills

Programming

C/C++, CUDA, OpenGL, Matlab, HTML/CSS/JS, Java, ARM, MIPS

Hardware

VHDL, ZYNQ & 7-Series FPGA, MCU & µProcessors, Jetson Nano, Oscilloscope, 3d-printing

CAD

Blender, Fusion 360, Rhino & Grasshopper

Interpersonal

Leadership, Presentation, Teaching, Project Management

Security Clearance

Northrop Grumman: DoD Secret

Interests

Eagle Scout 2018
FRC Robotics
Business

Email: amh1360@rit.edu Mailing Address: 3126 Elmwood Ave apt 16, Rochester, NY, 14618 Phone: (919)360-7260