

Harrison Green

Computer Science & Microbiology

<https://harrisongreen.me>

github.com/hgarrereyn

HarrisonMichaelGreen@gmail.com

Education **University of Pittsburgh - Honors College** / Pursuing B.S. in CS & Microbiology
August 2017 - April 2021 (expected), Pittsburgh (Cumulative GPA: 3.729)

- Cryptocurrency Club (President & Co-founder)
 - Information Security Club
 - Robotics and Automation Society
 - Russian Club
-

Experience **Durrant Lab - University of Pittsburgh** / Computational Biology Research
August 2018 - now, Pittsburgh

Using deep convolutional neural networks to improve ligand-protein binding affinity.
Developing tools to facilitate MPI parallelization across supercomputing clusters.

Lucy Labs CryptoFinance / Software Engineer Intern
May 2018 - August 2018, New York (remote)

Researched cryptocurrencies and developed real-time blockchain analysis tools that support efficient graph queries with Neo4j and Cypher.

IFM Technologies / Software Engineer Intern
June 2016 - September 2016, Chicago

Independently developed a drone control interface with an Angular frontend and a NodeJS/Cassandra backend. Created a RESTful API server to run data processing jobs and to facilitate ROS/WebSocket communications between system components.

Channel IQ (Acquired by MarketTrack) / Software Engineer Intern
June 2015 - February 2016, Chicago

Developed .NET MVC UIs in C# to visualize and administrate large Cassandra datasets. Wrote automated Scala tasks to perform data processing with Apache Spark in a continuous integration workflow.

Projects **MiniBit - A CPU from scratch**
harrisongreen.me/minibit

A working cpu built out of TTL and CMOS integrated circuits, 14 breadboards and many wires. Full schematic designed with KiCad and entire cpu simulated with Verilog.

OCRaaP (Optical Character Recognition as a Program)
github.com/hgarrereyn/ocraap

An esoteric, 2d programming language where you draw programs on a piece of paper. Symbol detection/classification is performed with OpenCV and TensorFlow.

RoombaSIM
github.com/pitt-ras/roombasim

A drone simulation platform written in Python for developing high-level AI algorithms to solve the International Aerial Robotics Competition Mission 7.
