

Io Hughto

http://hughto.io

Email : io.hughto@gmail.com

Mobile : +1-585-402-5911

EDUCATION

- **Indiana University** Bloomington, IN
Doctor of Philosophy in Astrophysics, Thesis: How Stars Freeze *Apr 2011 – May 2012*
- **Indiana University** Bloomington, IN
Master of Science in Astronomy *Aug 2007 – Apr 2011*
- **State University of New York at Geneseo** Geneseo, NY
Bachelor of Arts in Mathematics *Aug 2003 – Jun 2007*

EXPERIENCE

- **Qnect, LLC** Hadley, MA
Infrastructure Manager *Jan 2016 - current*
 - **Large Infrastructure Upgrades:** Transitioned the company from SVN to git, from a basic bug tracker to JIRA, and defined a workflow that maximized time that developers spend developing.
 - **Leveraging AWS Technologies:** Optimizing EC2 and RDS instances for throughput along with cost, maintaining auto-scaling groups for customer workload bursts, scaling our cloud computing infrastructure to handle rapid growth.
- **Qnect, LLC** Hadley, MA
Software Engineer *Jan 2014 - Dec 2015*
 - **3D Connection Software:** Determining connections of collections of parts in a 3D steel model to be sent to engineering.
 - **Client/Server Interface:** Creating translation units to allow multiple third-party user-facing system to interface with our backend infrastructure.
- **Mount Holyoke College** South Hadley, MA
Computer Science Lab Instructor *Aug 2013 - Dec 2013*
 - **Java Labs for Freshman and Sophomores:** Responsible for planning, lecturing, and grading of roughly 50 students spread across two classes in a semester at a premier women-only college.
- **Indiana University** Bloomington, IN
Postdoctoral Researcher *Jun 2012 - Jul 2013*
 - **Molecular Dynamics Simulations:** Extended and parallelized our group's Molecular Dynamics simulations using MPI, OpenMP, and CUDA in C to run asynchronously on the multi-thousand node supercomputers Kraken (at Oak Ridge National Lab) and Big Red (at Indiana University).
 - **Data Analysis:** Continued the direction of my thesis work and extended into the mantle of neutron stars to uncover information about 'nuclear pasta'.
- **Indiana University** Bloomington, IN
Research and Teaching Assistant *Aug 2007 - May 2012*
 - **Data Analysis:** Analyzed data in C & FORTRAN from large simulations of dense matter in the crusts of neutron stars

SIDE PROJECTS

- **Kefka Side Event Tracking:** Event tracking system used for hundreds of concurrent players for use during large Magic: the Gathering conventions.
- **JudgeApps:** System for maintaining exams, event applications, performance reviews, and general communication for the Magic: the Gathering judge program.