

NICHOLAS HARRAS

201-317-2212 • nickharras1@gmail.com • linkedin.com/in/nicholas-harras/

SKILLS

- **Programming Languages:** Proficient in Python, C, and Java; Familiar with SQLite, MySQL, Perl, PHP, and JavaScript
- **Technology and Software:** Vim, Git, ssh, X2Go, bash, tcsh, Slurm, InfluxDB, Grafana, Nmap, WireShark, VirtualBox, JSP, AWS (RDS and EC2), WordPress, HTML/CSS, \LaTeX
- **Clearance:** Public Trust

EXPERIENCE

National Oceanic and Atmospheric Administration

Princeton, NJ

Computer Operator

June 2019 - February 2020

- Utilized **Slurm** and other command line tools to maintain various Federal **Linux SUSE** HPC systems that scientists at NOAA's Geophysical Fluid Dynamics Lab rely on for their weather modeling
- Answered phones and worked with **OTRS** Help Desk ticketing system to assist scientists, often with **SSH** and **X2Go** connections, **Slurm** errors, and compiler issues
- Developed **Python** and **tcsh** scripts to automate various maintenance tasks

SEMGEEKS

Belmar, NJ

Web Development Intern

September - December 2017

- Worked closely with web developers and designers to help create websites for small businesses
- Utilized **WordPress** and **HTML/CSS** in a professional setting

PROJECTS

Operators' Log Migration (in progress)

Long term project with the goal of moving 30 years of Operators' log from text files to a relational database, utilizing **Python**, **SQLite**, and **MySQL**

- Developed software to autonomously navigate a section of a filesystem.
- Utilized input sanitation, capable to parsing a wide variety of logging styles over the course of the last 30 years
- Ran a large amount of tests and proofs-of-concepts, stress-tested and quality controlled utilizing **SQLite** database files, as to not overburden our systems before migration is to take place.

HPC Monitoring Dashboard

Grafana metrics dashboard for various statistics pertinent to monitoring GFDL/NOAA HPCs, utilizing an **InfluxDB** database and **Python**

- Developed **Python** wrappers of **Slurm** and system functions to constantly update an **InfluxDB** database
- Wrote software as part of a small team, prioritizing portability and readability
- Worked with other operators to find the most useful data representations for their needs

EDUCATION

Rutgers University

New Brunswick, NJ

B.S. in Computer Science

August 2018

- **Related Coursework:** Linear Optimization, Computer Security, Databases, Internet Technology, Systems Programming, Algorithms, Principles of Programming Languages, Intro to A.I., Computer Architecture, Discrete Structures I/II, Linear Algebra, Calculus I/II, Data Structures