

192 Victory Lane, Leetsdale PA 15056

□+1-315-532-0278 | ■ jeffrey.p.hafner@gmail.com | ♠ jphafner.github.io | ☑ jphafner | ₲ jphafner

I am a geek, a skeptic and I wear bowties for fun. I have been a Unix Engineer for a while now, and was described on my 2017 review as highly innovative. Currently I am an Unix Engineer Engineer for Fedex Supply Chain. Experience complimented by Ph.D. in Physics.

Technical Portfolio: C, R, and Python, Scheme, Lua, Bash, Perl, Fortran, C++, MFX.

Experience

Unix Engineer Pittsburgh, F

FEDEX SUPPLY CHAIN April 2020-Current

- I utilize Terraform and Ansible to deploy and configure systems on Oracle Cloud Infrastructure (OCI).
- I have written custom scripts to perform audits for clients and other stuff relating to OCI.
- I have brought automation with my Ansible skills.

ROC Engineer Pittsburgh, Pr

TECH MAHINDRA May 2019–December 2019

- Operate the inventory robots in Walmart
- Utilized ROS software in a Docker image
- · Work for BossaNova robotics through Tech Mahindra
- · All work was done on a Linux host

Unix Linux Systems Engineer New York, NY

IPsoft Inc Aug 2016–Mar 2018

- Manage IT infrastructure of high profile clients
- · Monitored client environments and developed automation to resolve issue
- Diagnosed issues with Unix/Linux.
- My communication with key clients was described as "commendable"
- Utilized Ansible and IPautomatas, their proprietary solution, to provide unix automation
- Provided automation for clients "that exceeds most of the rest of your teammates".

Physics Teacher Dobbs Ferry, NY

MASTERS SCHOOL 2015–2016

- Teaching 11th grade and AP Physics C: Mechanics
- An example lesson plan and lab report template used
- Utilized a unique assessment system that allowed infinite redos

Physics Teacher Baltimore, MD

BALTIMORE CITY PUBLIC SCHOOLS

- Teaching physics first at Mervo
- Utilized a unique assessment system that allowed infinite redos

Adjunct Physics Professor

Towson, MD

Towson University 2013-2014

• Teaching Light and Color, a non-major physics course

Postdoctoral Baltimore, MD

University of Maryland 2012

• Implementation of Particle Mesh Ewald Electrostatics for Continuous Constant pH Molecular Dynamics in CHARMMM.

Volunteer

UNIVERSITY AT BUFFALO

Physics Graduate Student Association Senator

Buffalo, NY

2014-2015

Aug 2008-Dec 2011

- Spent three years maintaining and starting the graduate student computer lab
- It involved Kerberos, OpenLDAP, OpenAFS, Python, Windows and Linux
- Was also in charge of the department webserver

MARCH 31, 2021 JEFFREY P. HAFNER RÉSUMÉ

Education

University at Buffalo Buffalo Buffalo

PH.D IN PHYSICSAug. 2006 – Feb. 2012

Andrews University

Berrien Springs, MI

B.S./M.S. IN BIOPHYSICS AND MATHEMATICAL STUDIES Aug. 2001 – Aug. 2006

Awards and Certifications

2016 **Red Hat Certified System Administrator**, License 130-172-497

2016 Cisco Certified Entry Networking Technician, License CSCO12981391

Projects

PHY506: Computational Physics 2

Buffalo, NY

UNIVERSITY AT BUFFALO Spring 2008

Implemented a cellular automata traffic modeler in Python to investigate phase transitions in traffic

PHY515: High Performance Computing 1

Buffalo, NY

University at Buffalo Fall 2008

Parallelized my dissertation utilizing ScaLAPACK.

CSE536: Computational Biology

Buffalo, NY

University at Buffalo Fall 2011

Implemented a 2D Hydrophobic-Hydrophilic Protein folder utilizing an Ant Colony Optimization Algorithm in Python.

Doctoral DissertationBuffalo, NY

University at Buffalo 2008–2011

- titled: Validation and Refinement of Course Grained Protein Models
- About a 100 pages of text, Over 5000 lines of C, and over 1000 lines of Python.
- Work was performed on the computing resources of UB Center for Computational Research

physicsAMC Dobbs Ferry, NY and Baltimore, MD

PHYSICS TEACHER 2014–2016

- A comprehensive physics exam bank that utilizes an Ipeg parser for question selection.
- This project enabled me to use an infinite redo policy on all assessments, without punishment, which was an important motivation for this project, and created some of my favorite memories.
- this project utilizes ET₇X, lua, lpeg, and tikz for graphics, and contains more than a 100,000 lines of code.
- sample-exam, https://github.com/jphafner/physicsAMC

physicsReport Dobbs Ferry, NY

PHYSICS TEACHER 2015

An example lesson plan, and lab report template that I used while a physics teacher, https://github.com/jphafner/physicsReport

Publications _____

2009	Approximate normal mode analysis based on vibrational subsystem analysis with high accuracy and	Hafner J. & Zheng
	efficiency, Journal of Chemical Physics	W.
2010	Optimal modeling of atomic fluctuations in protein crystal structures for weak crystal contact	Hafner J. & Zheng
	interactions, Journal of Chemical Physics	W.
2011	All-atom modeling of anisotropic atomic fluctuations in protein crystal structures, Journal of Chemical	Hafner J. & Zheng
	Physics	W