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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, PA

FEDEX SUPPLY CHAIN April 2020-Current

- Lutilize 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, PA

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

- 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

Physics Graduate Student Association Senator

Buffalo, NY

2014-2015

UNIVERSITY AT BUFFALO 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

JEFFREY P. HAFNER RÉSUMÉ MARCH 31, 2021

Education

University at Buffalo Buffalo, NY

Ph.D in Physics Aug. 2006 - Feb. 2012

Andrews University Berrien Springs, MI

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

Awards and Certifications

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

Cisco Certified Entry Networking Technician, License CSCO12981391 2016

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 Dissertation Buffalo, 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

2014-2016 PHYSICS TEACHER

- A comprehensive physics exam bank that utilizes an lpeg 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 ET_FX, 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.

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