

# Jeffrey Hafner

PHYSICIST

125 Radford St, Yonkers NY USA

+1-315-532-0278 | [jeffrey.p.hafner@gmail.com](mailto:jeffrey.p.hafner@gmail.com) | [jphafner.github.io](https://github.com/jphafner) | [jphafner](#) | [jphafner](#)

*"Before you leave the house, look in the mirror and take one thing off."—Coco*

## Experience

### Wilderness Guide and Camp Counselor

FLYING MOOSE LODGE

Was responsible for taking boys, aged 8–16, on 10 day excursions throughout the state of Maine.

[East Orland, ME](#)

2005

### Research Assistant

UNIVERSITY AT BUFFALO

- Produced three peer reviewed publications, and was chosen for one conference presentation.
- One publication was chosen as an editor's pick

[Buffalo, NY](#)

2008–2011

### Postdoctoral

UNIVERSITY OF MARYLAND

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

[Baltimore, MD](#)

2012

### Adjunct Physics Professor

TOWSON UNIVERSITY

Teaching Light and Color, a non-major physics course

[Towson, MD](#)

2013–2014

### Physics Teacher

BALTIMORE CITY PUBLIC SCHOOLS

- Teaching physics first at Mervo
- Utilized a unique assessment system that allowed infinite redos
- Yes, I am the guy in the video

[Baltimore, MD](#)

2014–2015

### Physics Teacher

MASTERS SCHOOL

- Teaching 11<sup>th</sup> and AP Physics B Mechanics
- An example lesson plan and lab report template used
- Utilized a unique assessment system that allowed infinite redos

[Dobbs Ferry, NY](#)

2015–2016

### Unix/Automation Engineer

IPSOFT INC

- provided automation for clients "that exceeds most of the rest of your teammates".
- My communication with key clients was described as "commendable".

[Manhattan, NY](#)

2016–Current

## Education

### Andrews University

B.S./M.S. IN BIOPHYSICS AND MATHEMATICAL STUDIES

3.31 GPA

[Berrien Springs, MI](#)

Aug. 2001 – Aug. 2006

### University at Buffalo

PH.D IN PHYSICS

3.50 GPA

[Buffalo, NY](#)

Aug. 2006 – Feb. 2012

## Projects

### NSF REU

PENN STATE UNIVERSITY

Implemented a monte carlo modeler in Matlab to make falsifiable predictions concerning kinesin processivity under William Hancock.

[University Park, PA](#)

Summer 2004

## PHY447: Advanced Lab 2

ANDREWS UNIVERSITY

Validated predicted reverberation times based on blue prints of the Howard Performing arts center

Berrien Springs, MI

Spring 2005

## PHY506: Computational Physics 2

UNIVERSITY AT BUFFALO

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

Buffalo, NY

Spring 2008

## PHY515: High Performance Computing 1

UNIVERSITY AT BUFFALO

Parallelized my dissertation utilizing ScaLAPACK.

Buffalo, NY

Fall 2008

## PHY551: Grad Physics Laboratory 1

UNIVERSITY AT BUFFALO

- Created Josephson junctions for use in super conductive conditions
- Utilized a Scanning Tunneling Microscope to investigate surface electron structure

Buffalo, NY

Fall 2007

## CSE536: Computational Biology

UNIVERSITY AT BUFFALO

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

Buffalo, NY

Fall 2011

## Doctoral Dissertation

UNIVERSITY AT BUFFALO

- 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

Buffalo, NY

2008–2011

## physicsAMC

PHYSICS TEACHER

2014–2016

- 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  $\text{\LaTeX}$ , lua, lpeg, and tikz for graphics, and contains more than a 100,000 lines of code.
- sample-exam

PhysicsAMC

multiple locations

## Awards and Certifications

2013–2014 **Intramural Champion**, University of Maryland

Baltimore, MD

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

RHCSA

2016 **Cisco Certified Entry Networking Technician**, License CSC012981391

CCENT

## IPsoft 2017 Performance Review

**Customer Satisfaction:** One drop for McKesson and 4 Merits overall in 2017. Not perfect, but not bad at all. Always aim to keep our clients happy and go that extra mile.

**Innovation:** You've put in significant effort into creating and optimizing automation. Fantastic! It shows great initiative that exceeds most of the rest of your teammates'.

**Overall:** Jeffrey,

I know working 3rd shift presents a great challenge in keeping in touch with the vibe and camaraderie of the rest of the team, but you've handled it well. You have done an admirable job working with the BLR team and Keith given the challenges; especially that this is your first real job in the field. Your communication efforts with McKesson in particular are commendable.

For the year ahead, I think you know what the primary area of improvement needs to be: Ticket Handling. Remember: Response times are important, but so are resolution times and diligent follow-up. You cannot let tickets linger for weeks or longer in your queue. Push to close them ASAP relevant to priority and provide periodic updates so the client knows issues are not being ignored. Additionally, please ensure to keep your station tidy. These are shared spaces so everyone is expected to clean up after themselves.

I see 2018 as a year of tremendous opportunity for you here. The minutia of your job requirements should not hold you back from excelling in a purely technical role. Correct those issues promptly then put in the effort to increase your technical expertise. Add in initiative to create more automation and create value for our clients and you will be on the fast track to a TL or TE role, or beyond. Here's looking forward to accelerated growth and evolving in the year ahead! —Brian