



Jeffrey P Hafner

Physicist

- May 23 1983
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About me —————
I am a geek, a skeptic and I wear bowties for fun.

Skill —————
(*)[The skill scale is from 0 (Fundamental Awareness) to 6 (Expert).]

interests

Backpacking/Racquetball

awards

2014 University at Maryland Intramural Racquetball Champion

education

2001-2006 M.S. Andrews University
Biophysics and Math studies
2008-2012 Ph.D. Physics University at Buffalo
Validation and refinement of coarse grained protein models.

publications

2009 Hafner J & Zheng W. Approximate normal mode analysis based on vibrational subsystem analysis with high accuracy and efficiency. J. Chem. Phys. 130, 194111 2009. (pdf)
2010 Hafner J & Zheng W. Optimal modeling of atomic fluctuations in protein crystal structures for weak crystal contact interactions. J. Chem. Phys. 132, 014111 2010. (pdf)
2011 Hafner J & Zheng W. All-atom modeling of anisotropic atomic fluctuations in protein crystal structures. J. Chem. Phys. 135, 144114 2011 (pdf)

experience

2005 Wilderness Guide and Camp Counselor Flying Moose Lodge
Was responsible for takings boys on 10 day excursions throughout the state of Maine.
2006-2008 Teaching Assistant University at Buffalo
Was responsible for laboratories and recitations.
2008-2011 Research Assistant University at Buffalo
Research that produced three peer reviewed publications.
2012 Postdoctoral University at Maryland
Implemwentation of Particle Mesh Ewald Electrostatics for Continuous Constant pH Molecular Dyanmcis in CHARMMM.
2013 Towson University Adjunct Physics Professor
Teaching the laboratory section of Light and Color
2014-2015 Baltimore City Public Schools Physics Teacher
Teaching physics first at Mervo
2015-2016 Masters School Physics Teacher
Teaching 11¹¹ and AP Physics B Mechanics
2016-CurrentIPsoft Inc Unix/Automation Engineer
Diagnose and Resolve clients Unix Requests

Projects

2004 NSF REU at Penn State
PHY405: Applied Mathematics Implemented a monte carlo modeler in Matlab to mo
in Octave
PHY477: Advanced Physics Lab II Validated predicted reverberation times based on bl
Performing Arts Center
PHY506: Computational Physics 2 Implemented a cellular automata traffic modeler in
PHY515: High Performance Computing Parallelized my dissertation project using ScaLAPACK
PHY536: Computational Biology Implemented a 2D Hydrophobi-Hydrophilic Protein
Colony Optimization algorithm in python.
physicsAMC A comprehensive physics exam bank that utilizes an
selection.
physicsReport An example lesson plan, and lab report template tha
teacher

