

David Tabor

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OBJECTIVE

Physics researcher with data-analytic programming experience seeks work in data science. Seven years experience working on complex, open-ended problems in a self-directed manner. Extensive background in data preparation, evaluation, and modeling of large data sets. Excellent communication skills, writing ability, and collaborative attitude.

EDUCATION

Northwestern University, Evanston, Illinois

September 2007 to July 2014

Ph.D. in Physics

- IGERT Fellow, 2009-2013. Awarded five years full funding for forming collaboration with Computer Science research group on thesis project.

Washington University in St. Louis, St. Louis, Missouri

August 2003 to May 2007

B.S., Majors in Physics and Math, Minor in Political Science

- Distinction in Math
- Cumulative GPA: 3.70/4.00
- Dean's List, four semesters of six eligible

MAJOR PROGRAMMING PROJECTS

Rate-Equation Simulation of Molecular Quantum State Evolution, 2013

- Developed modular Python libraries (total 1000+ lines) adding progressively more detail to description of experiment.
- Demonstrated predictive capacity by convergence and self-consistency testing.
- Mentored/educated undergraduates in molecular physics and simulation implementation.

Ion Trap Instability Analysis, 2009-2012

- Developed original analytic method for relating trap geometry to experimental performance. Resulted in first-author academic publication.
- Implemented analysis in Python, C++, and Lua. Used by lab to guide development of now-operational ion trap.

LANGUAGES

Expert in: Python (including Numpy, Scipy, and Scikit-learn)

Proficient in: SQL, C/C++, R, Unix shell/Regex, Matlab/Octave, Mathematica, Lua, LaTeX

Familiar w/: JavaScript, Fortran

TEACHING

Teaching Assistant, Northwestern University

September 2007 to June 2009,

Fundamentals of Computer Programming

September 2013 to March 2014

Introduction to Physics

- Led weekly course reviews to enhance student learning.
- Led lab sections of 20+ students.
- Provided instruction to groups of 80-120 undergraduates with emphasis on effective communication of complex ideas to a nontechnical audience.