

Jeff Stevens

Rochester Hills, MI
jefste@gmail.com

<http://resume.jefste.com>

cell: 614-859-2657
cell: 508-344-6044

Diverse, Successful Operations Experience, Scientific Knowledge and Technical Skills

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Solution-oriented and versatile professional. Proven ability to work successfully with diverse individuals to achieve organizational goals and meet targets on time and within budget. Ability to create and modify data and perform advanced statistical analysis. Ability to quickly learn new tools and understand new areas of data.

Key Competencies

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|----------------------------------|---------------------------|-----------------------------|
| •Data Integration | •Analytics, Data Analysis | •Multitasking |
| •Training/Motivation | •Detail-oriented | •Published, Peer Reviewed |
| •Data Models | •Leadership/Team Building | •Oral/Written Communication |
| •Hardware & Software Integration | •Process Improvement | •Problem Resolution |

PROFESSIONAL PROFILE

- Proficient with statistical and advanced quantitative analyses.
- Excellent collaboration and teamwork skills, ability to work cross functionally.
- Comfortable working in newly forming ambiguous areas.
- Demonstrate professional maturity and general business knowledge.
- Strong communication ability, both written and oral and an ability to communicate data effectively.
- Strong organizational skills and time management skills.
- Eight years of experience using Mathematica, Origin and Excel for data analysis; Familiarity with R and Python for data processing and analysis.
- More than seven years performing optics research utilizing solid state lasers and employing nonlinear optics techniques to generate femtosecond pulses of wavelengths in visible and UV regions.
- Three years LabVIEW programming experience integrating hardware required for data acquisition and motion control for femtosecond spectroscopy setups.
- Designed 13 biomolecules (proteins) optimally for time-resolved spectroscopy measurements, molecular cloning, cell expression and growth, and protein purification.

PROFESSIONAL EXPERIENCE

GRADUATE RESEARCH AND TEACHING ASSOCIATE, POST-DOCTORAL RESEARCHER

The Ohio State University – Columbus, OH

9/2003 – 8/2011

- Coded in LabVIEW to integrate all hardware required for data acquisition and motion control for femtosecond fluorescence spectroscopy up-conversion and transient absorption setups.
- Collaborated in 2-4 person research teams performing spectroscopy on proteins to understand fundamental protein dynamics.
- Designed proteins optimally for time-resolved spectroscopy experiments, molecular cloning, cell expression and growth, and protein purification.
- Published research results in peer-reviewed journals: Journal of American Chemical Society and Journal of Physical Chemistry A & B.
- Mentored graduate students on their time resolved spectroscopy projects.
- Four years teaching variety of recitations/labs to diverse set of undergraduate students.

CONTRACT LAB TECHNICIAN

Eastman Kodak Company Health Imaging Group – Oakdale, MN

9/2002 – 9/2003

- Tested optical properties of X-ray for long term stability including photo-induced and thermal effects of film.
- Produced small batches of prototype X-ray film with a goal to improve film quality and robustness.
- Assisted with quality control at film production plant during production crisis.

RESEARCH LAB ASSISTANT

University of Minnesota – Minneapolis, MN

9/2001 – 9/2002

- Constructed detectors for MINOS project (neutrino detection) at scintillator and module factory.
- Partnered with students and staff to build modules for MINOS with a focus on high quality production.

ACADEMIC EXPERIENCE

TEMPORARY FULL-TIME PHYSICS FACULTY

Olympic College MESH Department – Bremerton, WA

3/2014 – 6/2014

Lecturer for community college-level teaching focused on introductory physics to diverse set of undergraduates.

VISITING ASSISTANT PROFESSOR

Xavier University Physics Department – Cincinnati, OH

9/2012 – 9/2013

Lecturer for university-level teaching focused on introductory physics and astronomy to diverse set of undergraduates.

SOFTWARE/PROGRAMMING

LabVIEW - Integrated all hardware & software for DAQ and motion control for experimental data acquisition instrument; Wrote 50+ VIs and altered/implemented third party VIs for hardware control

Origin - Fitting and plotting of 200+ data sets

Mathematica - Wrote scripts to extract /calculate data from molecular simulation files and molecular coordinate files; Automated generation and fitting and analysis of time-resolved spectrum

HTML/CSS/Javascript - Designed and maintained research group and personal webpage

Python - Rewrote Mathematica scripts for data extraction from molecular coordinate files and for fitting of spectroscopy data

R/RStudio - Coursera: R Programming, Exploratory Data Analysis, Reproducible Research, Getting and Cleaning Data (in progress); **Udacity**: Data Analysis with R

SigmaPlot - Prepared publication-quality figures

Microsoft Office, L^AT_EX

EDUCATION

Ph.D. in Physics, The Ohio State University – Columbus, OH

Thesis: Ultrafast Spectroscopy Studies of Heme Proteins Cytochrome *c* and Myoglobin

Bachelor of Science in Physics, University of Minnesota – Minneapolis, MN

HONORS & AFFILIATIONS

American Association of Physics Teachers Outstanding TA Award, 2005

Hazel Brown Outstanding Teaching Assistant Award, 2004

American Physical Society (APS), American Association of Physics Teachers (AAPT)

PUBLICATIONS

1. C. Zang, J. A. Stevens, J. J. Link, L. Guo, L. Wang, and D. Zhong, "Ultrafast Proteinquake Dynamics in Cytochrome *c*," *J. Amer. Chem. Soc.*, **131**, 10677 (2009). <http://dx.doi.org/10.1021/ja8057293>
2. J. A. Stevens, J. J. Link, Y.-T. Kao, C. Zang, L. Wang, and D. Zhong, "Ultrafast Dynamics of Resonance Energy Transfer in Myoglobin: Probing Local Conformation Fluctuations," *J. Phys. Chem. B*, **141**, 1498 (2010). <http://dx.doi.org/10.1021/jp910013f>
3. C.-W. Chang, T.-F. He, L. Guo, J. A. Stevens, T. Li, L. Wang, and D. Zhong, "Mapping Solvation Dynamics at the Function Site of Flavodoxin in Three Redox States," *J. Amer. Chem. Soc.*, **132**, 12741 (2010). <http://dx.doi.org/10.1021/ja1050154>
4. J. A. Stevens, J. J. Link, Y.-T. Kao, C. Zang, L. Wang, and D. Zhong, "Ultrafast Dynamics of Nonequilibrium Resonance Energy Transfer and Probing Globular Protein Flexibility of Myoglobin," *J. Phys. Chem. A*, **116**, 2610 (2012). <http://dx.doi.org/10.1021/jp206106j>