Michael Johnson

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Education/Academic Preparation

M.S. in Chemical Engineering, Iowa State University, 2016
B.S. in Biological Engineering and Chemical Engineering, Washington State University, 2013

Professional Employment History

- Full Time Instructor (Physics and Physical Science), Grand View University, Des Moines, Iowa
  August 2016 – present
- Adjunct Professor in Chemistry, Olympic Community College, Bremerton, Washington
  July 2016 – August 2016
- Chemistry Tutor, Olympic Community College, Bremerton, Washington
  May 2016 – August 2016
- Symbi Fellow, Center for Biorenewable Chemicals, Iowa State University
  July 2015 – May 2016

Learning Python Programming and Coding

- Java, MatLab and Python (Pandas, Numpy, Matplotlib, and more)
  - Learned Java through coursework in community college
  - Worked with MatLab throughout college (extensively in graduate research)
    - Highly proficient in using excel for data analysis as well
  - Learning Python as a hobby over past year
- HTML, CSS, JavaScript:
  - Began exploring HTML in High School
  - Fluid ability to work with HTML and CSS
  - Intermediate experience in using SASS (with and without Compass)
  - Experience with functional programming in JavaScript, interaction with DOM
  - Some experience with using library JS like bootstrap, jQuery, and AJAX
  - app development with AngularJS, EmberJS, etc
- Git and Github
  - Ability to install, use Git Bash commands, and configure .bash_profile
  - Experience in: Initiating and cloning repositories, performing edits and committing changes, comparing differences, branching and merging, pushing and pulling, forking, and pull requests
- WordPress:
  - Currently have a WordPress page for my classes
  - Ability to embed simulation apps and videos
  - Willingness to learn how to set up server host and set up WordPress locally

Pertinent Skills

- **Collaboration**: Thrive in collaborative work environment and believe in the power of collaboration to facilitate and speed up work flow. Enjoy version control systems like Git/GitHub for collaborative work.
- **Entrepreneurial Spirit**: Former attempts at ideating and developing startups. Attended EntreFest 2012 in Iowa City during M.S. studies and collaborated with tech startup during B.S. studies.
- **Problem Solving:** Skills developed through engineering design, modeling and problem-solving process. Seeks outside resources and implement innovative solutions to solve problems more efficiently
- **Leadership**
    - Initiating and organizing Art+Science Book Club at Grand View University starting May 2017
    - Organizing and planning Faculty Colloquium Speaker Series at Grand View University starting August 2017
    - Starting Graduate Learning Community (included applying for funding, hosting speakers and lunches, and forming "Accountability Teams") and participating in writing Peer Review Groups while studying for my M.S.
    - Participating in numerous professional development activities in all stages of my career

Teaching Experience: Summer 2016- Spring 2018

- Phys 131-132, Introduction to Physics with Lab (2 years, Grand View University)
- PHSC 201, Contemporary Issues in Science (3 sections, Grand View University)
- PHSC 101, Physical and Earth Science (4 sections, Grand View University)
- Chem 111 Lab, Introduction to Chemistry I Lab (1 section, Grand View University)
- Chem 121, Introduction to Chemistry for Nursing + Lab component (1 Section, Olympic College)

Scholarly Activities

Graduate research conducted in the lab of Dr. Andrew C. Hillier

Iowa State University, August 2013 – May 2016

Fabrication of nano-scaled structures and thin metal/dielectric coatings to investigate the properties of surface plasmon resonance, an optical sensor. Research and characterization of surface chemistry. Uses atomic force microscopy (AFM), thin film deposition (evaporative and sputter coating), laser interference lithography and lithographic replication.

Undergraduate research conducted in the lab of Dr. Nehal Abu-Lail

Washington State University, September 2010 – May 2013

Experimented on epidemic (pathogenic) and nonpathogenic bacterial strains to distinguish the two bacterial categories on biophysical basis. Inoculated and grew bacterial cultures into the late exponential growth phase. Methods used included AFM, electrophoresis and colorimetric assays.

Publication

Yin Huang, Longju Liu, Michael Johnson, Andrew C Hillier, and Meng Lu. One-step sol–gel imprint lithography for guided-mode resonance structures. Published 29 January 2016. Nanotechnology, Volume 27, Number 9.