## Jeremy Gresham

(336) 972-6733 | greshjs@gmail.com Github | LinkedIn https://ihautai.github.io

### **Technical Skills**

- Python programming, including Object-Oriented programming, data analysis with Pandas, machine learning with Scikit-Learn, test-driven development
- Django, django-rest-framework
- Experience with JavaScript, including E3 for data visualization and mapping with TopoJSON, GeoJSON or shapefiles
- Technical Writing
- Proficient with LATEX, a technical typesetting language
- Proficient with Maple and Matlab, mathematics and modeling software
- 2D/3D CAD/CAM
- Basic electronics, soldering, experience with Arduino and BeagleBone Black
- Knowledge of PHP, HTML, CSS, Java
- Comfortable with the GNU/Linux, Mac and Windows families of operating systems

## **Professional Training**

The Iron Yard Durham, NC Python Programming May 2015 - July 2015

Final Project: 'Moovn On' webapp Description of Responsibilities:

Heroku management and deployment, creation of a django back-end with read-only RESTful API, data gathering, data cleaning, data visualization with D3.js, map making and bubble-charting *Technologies Used:* 

Python3, Django, django-rest-framework, requests (a Python library), GIS data from Census.gov and Zillow, ogr2ogr, GeoJSON, TopoJSON, D3.js, JavaScript, jQuery, HTML, Heroku, PostgreSQL, SVG

#### Education

Master of Science (MS), Mathematics University of North Carolina Wilmington 2011

**Bachelor of Science (BS), Mathematics** Minor in Physics North Carolina State University

2007

# **Employment**

**ShopBot Tools, Inc.** Support Technician

Durham, NC November 2013 - May 2015

- Provide technical support for hardware, software, and mechanical aspects of CNC tools for ShopBot
- Collect information about customer issues with construction and installation, operation, configuration, customization, and usage of tools and software. Identify problems, investigate causes, generate tests, and analyze test results. Research technical issues to resolve complex issues. Provide specific instructions and guidance to customers to troubleshoot and resolve issues.

- Responsible for supporting a range of technical issues, including machine repair, parts replacement, wiring instructions, general tool use, calibration, tool path generation (2D/3D CAD/CAM), coding, and integration into manufacturing processes
- Track new product development to prepare for new systems, tools and accessories and understand how they function and how they will be integrated with existing software.
- Assist in general software testing and suggest improvements to user interface

## Wake Forest Baptist Medical Center

WakeOne Credential Trainer

Winston-Salem, NC June-October, 2012

- Facilitated specialized one-day training sessions for physicians and surgeons to orient them in the use
  of a new heavily customized Electronic Medical Record (EMR), focusing on accurate documentation of
  patient visits and surgical consultations
- Provided in-person follow-up support to medical teams upon system implementation
- Analyzed system roll-out and implementation and provided recommendations to programmers regarding design issues and bugs

### University of North Carolina Wilmington

Graduate Teaching Assistant

Wilmington, NC *2009-2011* 

- Independently prepared and delivered lectures and assignments to fit the designated curriculum for two sections of College Algebra, including preparation of exams and quizzes
- Assisted the instructors of four sections of Calculus, including delivering lectures and grading assignments and exams
- Provided walk-in tutoring to undergraduate students, with a specialization in tutoring for advanced Calculus, Linear Algebra, and Differential Equations

# **Conference Participation**

- AMS Special Session on Kac-Moody Algebras, Vertex (Operator) Algebras, and Applications, University of Richmond, November 2010
- Lie Theory Conference, University of Georgia, May 2010
- Lie and Representation Theory Summer School, University of Georgia, May 2010
- NSF/CBMS Regional Conference on Quiver Varieties and Quantum Affine Algebras, North Carolina State University, May 2010

#### **Publications**

• Masters Thesis, Representations of Infinite Dimensional Lie Algebras and Dirac's Positron Theory