

**Jeremy Gresham**  
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## Technical Skills

- Python programming, including Object-Oriented programming, data analysis with Pandas, machine learning with Scikit-Learn, test-driven development
- Django development
- Experience with Javascript, including d3 for data visualization and mapping with geoJSON or shapefiles
- Technical Writing
- Proficient with L<sup>A</sup>T<sub>E</sub>X, a technical typesetting language
- Proficient with Maple and Matlab, mathematics and modeling software
- 2D/3D CAD/CAM
- Experience with Arduino and BeagleBone Black
- Knowledge of PHP, HTML, CSS, Java
- Basic electronics, soldering

## Professional Training

### The Iron Yard

Python Programming  
Final Project

Durham, NC  
July 24, 2015  
'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

### Masters 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 customers
- 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

**Whole Foods Market**  
*Cashier/Supervisor*

Raleigh, NC  
*2007-2009*

- Provided effective and efficient customer service in a fast-paced environment
- Assisted in the management of a team of cashiers and baggers, providing support and oversight to ensure accurate checkout procedures

**North Carolina State University**  
*Calculus Grader*

Raleigh, NC  
*2006-2007*

- Assisted Calculus course instructors to grade tests, quizzes and assignments

**North Carolina State University**  
*Maple Tutor*

Raleigh, NC  
*2005-2007*

- Provided comprehensive assistance to undergraduate and graduate students utilizing Maple, a mathematics and modeling software, including troubleshooting programming errors and strengthening students comprehension of mathematical concepts

**North Carolina State University**  
*Physics and Mathematics Tutor*

Raleigh, NC  
*2004*

- Tutored undergraduate physics and mathematics

## 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*