

**Jeremy Gresham**  
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## Technical Skills

- Python programming, data analysis with Pandas, machine learning with Scikit-Learn, Django, django-rest-framework
- Scala programming, including Akka framework
- C++11/14 programming using the Standard Library and Boost
- R programming
- Experience with JavaScript, including D3 for data visualization and mapping with TopoJSON, GeoJSON or shapefiles
- Node.js with Express.js and Jade/Pug
- Technical Writing
- Proficient with  $\text{\LaTeX}$ , 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
- Comfortable with the GNU/Linux, Mac and Windows families of operating systems

## Professional Training

### The Iron Yard

Python Programming

Durham, NC

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, GIS data from Census.gov and Zillow, ogr2ogr, GeoJSON, TopoJSON, D3.js, JavaScript, jQuery, HTML, Heroku, PostgreSQL, SVG

## Education

### Master of Science (MS), Mathematics

2011

University of North Carolina Wilmington

### Bachelor of Science (BS), Mathematics Minor in Physics

2007

North Carolina State University

## Employment

### Duke Cancer Institute, Bioinformatics Shared Resource

Scientific Programmer

Durham, NC

November 2015 - Present

- Developing algorithms and simulations
- Developing pipelines for preprocessing, imputation and analysis of Next-Generation Sequencing data
- Programming in a variety of environments and languages including Python, Scala, C/C++, R, Bash
- Collaboration with cancer researchers and statisticians
- All code produced to be shared with the research community under a public license (usually GPLv3)

### **ShopBot Tools, Inc.**

*Support Technician*

Durham, NC

*November 2013 - May 2015*

- Provided technical support for hardware, software, and mechanical aspects of CNC tools for ShopBot customers
- Collected 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.
- Was 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
- Tracked 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.
- Assisted 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