Joshua Cook

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Education

2014-2015

Bachelor of Science, Mathematics Cal State Northridge (Northridge, Ca)

Senior Thesis: **Computational Methods in Molecular Quantum Mechanics**

Senior Project: **The Zernike Polynomials**

Poster Presented:
Applications of Imaginary Time Propagation Method in Material Research

Funding provided by National Science Foundation through **PREM** Grant.

2012-2014

Associate of Science, Physics Santa Barbara City College (Santa Barbara, Ca)

Experience

2015

Sofware Quality Assurance Engineer Invoca (Santa Barbara, Ca)

- Perform blackbox, whitebox, system and load testing of a SaaS Ruby-on-Rails web application with an emphasis on SIP systems (FreeSwitch), API responses and webhooks, call fraud detection, and event handling and messaging queues (AMQP, RabbitMQ).
- Plan, develop, and iterate automated testing suite using Rspec, Capybara, and Selenium.
- Develop and deploy **API Echo Server** for use in testing.
- Develop **Ruby Gem SIP client** and **Ruby Gem SIP load testing tool** each with command line interfaces built using the Thor library.
- Configure, provision, and deploy local, Vagrant, and cloud (AWS) instances. Maintain **repository** of Vagrant boxes for quick provisioning.
- Scrum Master for Scrum Team

2014-2015

Scientific Software Engineering Intern Lab of **Dr. Jussi Eloranta**

Cal State Northridge, Department of Chemistry and Biochemistry (Northridge, Ca)

- Planned, developed, and iterated computational algorithms for diagonalizing large matrices (numpy/scipy, blas/lapack/arpack).
- Developed **bash tools** for use in development environment.
- Trained others in software development process.
- Configured and maintained student Linux workstations.

2012-2014

Full-Stack Web Developer Phylia, De M. (Remote)

- Solely responsible for all development and maintenance (magento, MySQL).
- Scaled seamlessly from $50,000 in annual sales to $1 million in annual sales.
- Implemented all front end design and performances features (JavaScript, jQuery).
- Iterated site through two distinct design revisions.
- Iterated site through two distinct infrastructure changes.
- Responsible for development, staging, and production environment maintenance.
- Managed SQL Database and created routine database backup and maintenance jobs.
- Wrote custom PHP scripts for integrations with shipping (FedEx, UPS, drop-shipper) and accounting (QuickBooks) processes.

Additional

Have run five marathons (4:20 personal best).

Have bicycled from Ventura to San Francisco.

Have bicycled from Talinn, Estonia to Helsinki, Finland.

Have visited 39 states.