

# Joshua Cook

Bash, C, Latex, Python, Ruby

BLAS/Lapack, numpy/scipy/pandas, `scikit-image`, `scikit-learn`

Computational Mathematics, Machine Learning

\*nix, AWS, Chef, Docker, Heroku, RESTful APIs, SIP/VOIP, SQL/NoSQL, web sockets, Vagrant

+13104331646 · [joshuacook.me](http://joshuacook.me) · [me@joshuacook.me](mailto:me@joshuacook.me)



---

## Experience

- |                  |   |
|------------------|---|
| 7/2016 - Present | <b>Senior Python Engineer</b> for <b>Inrix</b> (Santa Monica, Ca) <ul style="list-style-type: none"><li>• Design and implement predictive models for parking data using pure numpy</li><li>• Develop data quality metrics and use to assess proprietary and competitor data</li><li>• Elaborate upon existing in-house data processing and analysis tools</li></ul>   |
| 1/2016 - 7/2016  | <b>Automation Engineer</b> for <b>Telescope, Inc</b> (Los Angeles, Ca) <ul style="list-style-type: none"><li>• Designed and built <b>automation platform</b> for continuous automated testing of platform API using AWS Elastic Compute Cloud, Simple Queue Service(AWS Ruby SDK), and Relational Database Service (MySQL).</li><li>• Wrote all system software and unit tests using Ruby frameworks (Rails, Sinatra, and RSpec).</li></ul> |
| 5/2015 - 1/2016  | <b>Software Quality Assurance Engineer</b> for <b>Invoca</b> (Santa Barbara, Ca) <ul style="list-style-type: none"><li>• Performed quality assurance testing for a Ruby-on-Rails web application (Ruby, RSpec, Chef).</li><li>• Served as scrum master for development team.</li></ul>  |
| 8/2014 - 5/2015  | <b>Computational Mathematics Internship</b> in the Lab of <b>Dr. Jussi Eloranta</b><br>Cal State Northridge, Department of Chemistry and Biochemistry (Northridge, Ca) <ul style="list-style-type: none"><li>• Elaborated upon algorithms for diagonalizing large matrices (C, Python).</li><li>• Configured and maintained student Linux workstations (Fedora).</li></ul>  |
| 8/2012 - 8/2014  | <b>Site Architect</b> for <b>Phylia de M.</b> (Los Angeles, Ca) <ul style="list-style-type: none"><li>• Designed site architecture using Linux (Ubuntu), Apache, MySQL, and Magento (PHP).</li><li>• Configured and provisioned Linux servers for development and production environments.</li><li>• Managed multiple MySQL databases via scripted backup and maintenance.</li></ul>  |
| 1/2005 - 6/2012  | <b>High School Mathematics Teacher</b> (Los Angeles, Ca) <ul style="list-style-type: none"><li>• Taught Geometry and Pre-Calculus at the Secondary-level in South Los Angeles in English and Spanish.</li><li>• Trained student teachers.</li><li>• Served as Department Chair Animo Justice Charter High School, 2007-2010.</li></ul>  |

---

## Projects & Publications

- |                         |  |
|-------------------------|--|
| AWS System Architecture | Designed <b>image analysis system</b> using AWS Elastic Compute Cloud, Simple Queue Service, and Relational Database Service (PostgreSQL). Wrote all system software and unit tests using Ruby frameworks (Rails, Sinatra, and RSpec) and Python frameworks (numpy, <code>scikit-image</code> , and <code>scikit-learn</code> ). |
| C & Ruby                | <b>simple_sipp_load_tester gem</b> , a wrapper to a complex C tool for load testing SIP platforms.   |

`invoke_call` gem, a command line SIP client.

Docker & Jupyter

*the Containerized Jupyter Platform*, a reference text on using Docker to build a distributed data science platform.

---

## Education

**Master of Applied Statistics** at UCLA *expected completion May 2018* (Los Angeles, Ca)

**Bachelor of Science in Mathematics** at Cal State Northridge (Northridge, Ca).

- Did graduate-level work in computational materials science through NSF sponsored internship with Chemistry lab.
- Presented poster, *Applications of Imaginary Time Propagation Method in Material Research*.
- Wrote senior thesis, *Computational Methods in Molecular Quantum Mechanics*.

**Master of Education** at UCLA (Los Angeles, Ca)

**Bachelor of Arts in English** at UC Berkeley (Berkeley, Ca).

**Machine Learning Nanodegree** via **Udacity** *expected completion August 2016*