

# Dr. Patrick S. Rhomberg

## Software Engineer

Doctor of Philosophy in Applied Mathematics and  
Computational Sciences

Master of Computer Science

Phone: (319) 621-2734

Email: [root@patrhom.com](mailto:root@patrhom.com)

Homepage: [home.patrhom.com](http://home.patrhom.com)

GitHub: [github.patrhom.com](https://github.com/patrhom)

LinkedIn: [linkedin.patrhom.com](https://www.linkedin.com/company/patrhom)

## Developer Experience

### Software Engineer

Pivotal Software, Inc.

Jan 2017 – NOW=\$(date +"%b %Y")

#### Highlights:

Developed and maintained continuous-integration infrastructure, including migration of that infrastructure from AWS to GCP

Expanded scope and improved granularity of security permissions for all cluster operations

Redesigned and rewrote GemFire's `gradle` build to respect modularity, with focus on build parallelization and incrementalization, clean delineation of code ownership and testing boundaries between supporting projects, and maintaining artifact expectation for downstream projects.

## A previous life as an academic

### Teaching Assistant

The University of Iowa, Department of Computer Science

Sept 2014 – May 2016

### Adjunct Professor

Cornell College, Department of Mathematics and Statistics

Sept 2013 – Dec 2013

### Assistant in Instruction

The University of Iowa, Department of Mathematics

Sept 2013 – Dec 2013

### Teaching Assistant

The University of Iowa, Department of Mathematics

Aug 2007 – May 2013

Complete teaching history available at: <http://home.patrhom.com/resources/resume/teaching.pdf>

My current academic interests in discrete graph modeling as applied to player ranking and matchmaking.

## Other notable work

I am the author of [/u/roll.one.for.me](https://u/roll.one.for.me), a table-rolling Reddit bot for [/r/DnDBehindTheScreen](https://r/DnDBehindTheScreen) and related subreddits. The bot is GCP-hosted and deployed via Docker, with source viewable [on GitHub](https://github.com/patrhom/roll-one-for-me).

My doctoral thesis, *On the Scalable Parallelization of Network Diffusion Models*, is available at the University of Iowa's Institutional Repository: <https://ir.uiowa.edu/etd/5831/>

## Developer Details

### Languages Known

**Fluent:** Java JDK 8, Python3

**Conversational:** Java JDK 11 / Jigsaw modules, Groovy, Python2

**Out of practice but happy to relearn:** C, C++, Perl, Matlab, Gnuplot

### Tool Proficiencies

**With expertise:** git, bash, emacs, the Gradle build tool, IntelliJ and PyCharm

**Proficient:** Docker (so hot right now), AWS and GCP, L<sup>A</sup>T<sub>E</sub>X, Concourse continuous integration, Jinja2

**Half proficient:** vim

### Strong opinions, held

A problem does not need to become costly before its solution has value.

A product withers on the vine when its build system is broken.

A responsible developer know how it works.

Tests form the contract of permissible product behavior.

Product confidence necessitates test confidence.

**Perfect** is certainly the enemy **good**,

but **good enough** will be the death of them both.

A responsible developer seeks out the full usefulness of their tools.

Your IDE will help you if you learn how to ask it.