Dr. Patrick S. Rhomberg

Software Engineer

Doctor of Philosophy in Applied Mathematics and Computational Sciences

Master of Computer Science

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Developer experience

Software Engineer Jan 2017 – NOW=$(date +"%b %Y")
Pivotal Software, Inc.

Highlights

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

Expanded scope and granularity of security permissions for all cluster operations

Parallelized `precheckin` testing suite, reducing execution time ∼3 hours to ∼45 minutes

Redesigned and rewrote GemFire's `gradle` build to respect modularity, allow build parallelization and incrementalization, and cleanly delineate ownership and testing boundaries between supporting projects, all the while maintaining artifact expectation for downstream projects.

A previous life as an academic

Teaching Assistant Sept 2014 – May 2016
The University of Iowa, Department of Computer Science

Adjunct Professor Sept 2013 – Dec 2013
Cornell College, Department of Mathematics and Statistics

Assistant in Instruction Sept 2013 – Dec 2013
The University of Iowa, Department of Mathematics

Teaching Assistant Aug 2007 – May 2013
The University of Iowa, Department of Mathematics

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

Other notable work

I am the author of /u/roll_one_for_me, username-summoned table-roller for /r/DnDBehindTheScreen andrelated subreddits. The bot is GCP-hosted, deployed via Docker, and public on GitHub

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/

A Summary of Me as a Developer

I'm a polyglot. I love learning and delight in having confience that I've chosen the right tool for a given job.

Language and Tool Proficiencies

Fluent and well-spoken:

Java JDK 8

Python (both 2 and 3)

The Gradle build tool

`git`, because of course `git`

Linux, `bash`, and `emacs`

Concourse continuous integration, and as a tangential consequence, Jinja2

The JetBrains family at large, but predominantly IntelliJ and PyCharm, as one might expected from the above

Conversational:

Java JDK 11 and Jigsaw modules.

Docker. So hot right now.

AWS and GCP, predominantly as vehicles for previously mentioned continuous integration and personal projects.

`vim`, because as much as I prefer `emacs`, I use the tools available to me.

Out of practice but happy to relearn:

C / C++, Perl, Matlab, Gnuplot

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.

A responsible developer seeks out the full usefulness of their tools.
Your IDE will help you if you learn how to ask it.