

Rory Finnegan

Education

- 2014–2016 **Master of Science**,
Computational Neuroscience.
McMaster University
- 2008–2014 **Bachelor of Computer Science (Hons., Co-op)**, *Psychology minor*,
Specializing in Computer Systems and Databases.
University of Manitoba

Experience

Vocational

- 2016–Present **Senior Developer**, *Invenia*.
Developed software that corrects for inefficiencies in the power grid and mentored new team members.
- Achievements:
- Developed and deployed new predictive models.
 - Migrated the existing MATLAB platform to Julia.
 - Created and contributed to a variety of FOSS projects.
- 2013–2015 **Junior Developer**, *Invenia*.
Worked on the infrastructure team to manage and streamline their AWS deployments.
- Achievements:
- Reduced Gentoo AMI build time from 3hrs to under 30 min.
 - Reduced EC2 stack deployment time from 20 min to 3min.
 - Setup a centralized user authentication system.
- 2012–2013 **Undergraduate Research Associate**, *HCI Lab*, University of Manitoba.
Developed an immersive application for visualizing and interacting with spatiotemporal data.
- Achievements:
- Developed & maintained math and graphics libraries.
 - Created several immersive applications.
 - Wrote a literature review of related research.
 - Administered the lab's server and provided technical support for other lab members
- 2011–2012 **Computer Programmer & Analyst**, *Public Health Agency of Canada*.
National Microbiology Lab - Bioinformatics core
Developed a quality control module for their HIV mutation analysis pipeline to aid clinicians around the world in prescribing the most effect drug treatments for their patients.

Miscellaneous

- 2008–2010 **Bicycle Courier**, *Natural Cycle Courier*.
Delivered packages, dispatched calls, billed clients.
- 2008–2009 **Backshop Clerk**, *St. Charles Country Club*.
- 2006–2008 **Produce Clerk**, *Food Fare*.

Technical Skills

Languages

Work Experience: C/C++, Python, Julia, Perl, Shell, Java, HTML, JSON, Awk, CSS, MATLAB

Basic Knowledge: Rust, Jess, Lisp, Prolog, PHP, C#, Go

Systems

Work Experience: Linux (Red Hat, Debian & Gentoo based), Windows 7, macOS

Basic Knowledge: FreeBSD, Arch Linux, SunOS, Windows 98 & XP

Databases

Work Experience: Postgres, SQLite, MongoDB

Basic Knowledge: MySQL, HSQLDB, IBM DB2

Software

Work Experience: Git, AWS, Ansible, Docker, Vagrant, nginx, LDAP, Slurm

Personal Experience: \LaTeX

Hardware

Work Experience: Maintaining various Linux Servers

Publications

Rory Finnegan, Mark Shaw, and Suzanna Becker. Restricted boltzmann machine models of hippocampal coding and neurogenesis. In *The Rewiring Brain*, chapter 21, pages 443–461. Elsevier, 7 2017.

Rory Finnegan. Computational modelling of adult hippocampal neurogenesis. Master's thesis, Neuroscience, 1280 Main St W, Hamilton, 8 2016.

Rory Finnegan and Suzanna Becker. Neurogenesis paradoxically decreases both pattern separation and memory interference. *Frontiers in Systems Neuroscience*, 9(136), 2015.

Barrett Ens, Rory Finnegan, and Pourang Irani. The personal cockpit: A spatial interface for effective task switching on head-worn displays. In *Proceedings of the 2014 ACM annual conference on Human factors in computing systems*, CHI '14, pages 3171–3180, New York, NY, USA, 2014. ACM.