Rory M. Flynn

Data Science, Statistics, Machine Learning

🏠	Location:	*REDACTED*
📱	Phone :	*REDACTED*
✉	Email :	*REDACTED*
🌐	Website:	www.RMFlynn.co
⌾	Github:	www.github.com/rmFlynn

Education

Masters of Computer Science Graduated: Dec. 12, 2020 — **University of Colorado, Denver**
Concentration: Data Science in Biomedicine, **Read My Thesis**

Bachelors of Science in Mathematics Graduated: Dec. 11, 2015 — **Metropolitan State University of Denver**
Concentration: Probability and Statistics — Minor: Chemistry

Previous/Current Employment

Research Software Engineer *Apr. 2021 - Now* — **Colorado State University**
- Lead developer of DRAM. Creator of DRAM2 adding 75%+ new code, 30% new features, & 10x faster.
- Responded to and closed 100+ issues for lab maintained FOSS projects, on GitHub and Jera.
- Maintained Code base, Documentation, Code Quality Statistics, and CI on GitHub.
- Assisted in authoring publications for scientific journals, and presented work at scientific conferences.
- Worked with technical and nontechnical team members, to develop and communicate solutions.

Machine Learning Graduate Apprentice *Jan. 2020 - Dec. 2020* — **University of Colorado Denver**
- Designed an original algorithm, to address the challenge of imbalanced classes in genetic data.

Graduate Intern *May 2019 - Aug. 2019* — **National Renewable Energy Lab (NREL)**
- Developed python package for importing, cleaning, and transforming data from partner institutions.

Research Associate *Mar. 2016 - Aug. 2018* — **BBC Research and Consulting**
- Performed various system admin, automation, and scientific programming tasks using SQL, Perl, and VBA.
- Created complex web applications for data entry, tracking, and manipulation using R-shiny.
- Automated analysis, including regression, ANOVA, and Monte Carlo Simulation using R and Perl.

Publications, Presentations

In progress **First Author**	R. M. Flynn, M. A. Borton, B. Bolduc, *et al.*, "Dram2: Impoved annotating and functional profiling of genomes with phylogenetic trees," 2023
Preprint **Co-Author**	I. Leleiwi, J. Rodriguez-Ramos, M. Shaffer, *et al.*, "Exposing new taxonomic variation with inflammation – a murine model-specific genome database for gut microbiome researchers," *bioRxiv*, 2022. DOI: 10.1101/...
Masters Thesis **First Author**	R. M. FLYNN, "Predicting autism spectrum disorder from genome-wide association data with genetic balancing generative adversarial network," Ph.D. dissertation, proquest, 2021

Skills

Programming Languages

Python	*Expert*	7+ years, all perposes use
JavaScript	*Intermediate*	4+ years, for visuals and UI
C++	*Intermediate*	3 years, for low level tasks
R	*Intermediate*	4+ years, for data analysis

Operating Systems

Linux: **Expert** 9+ years heavy use
Deep understanding of the Linux tool kit, packaging formats, file structure, and ecosystem. Highly effective in a command line environment, with a long history using Docker, Vi/Vim, ssh and other system tools.

Windows: **Intermediate** 9+ years of use
Troubleshooting and programming, using tools like PowerShell, ODBC, VBA, and WSL.

Disciplines

Distributed Computing	**Random Forests**
UI Design	**Genetic Data Science**
Data Visualization	**Technical Documentation**

Other Software

Git	**CL1/vim/ssh**	**VirtualBox**	**Docker**
TEX/LaTeX	**Excel/Other**	**SnakeMake**	**SLURM**

Interests

Generative AI **Data Abstraction** **Meta Learning**
Probabilistic Graphs **Data Rights & Privacy**