

Jasmine Dumas

Data Scientist

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About Me

I'm a Data Scientist & Engineer with industry experience in financial technology, auto insurance, medical devices, R&D, and aerospace manufacturing. I'm an active member of the R programming community and have developed 4 open source R packages and participated in Google Summer of Code, NASA Datanauts, R-Ladies, and R Foundation taskforce: Forwards.

I'm searching for a remote-friendly company that values creativity, diversity and openness as a lead or Sr. Data Scientist developing data products & algorithms with R & Python while mentoring junior team members.

Technical Skills

- Computational programming & machine learning with R and Python
- Statistical Analysis and inference
- Data processing & querying with SQL
- Web application development with Shiny and Bootstrap
- Collaborative computing with GitHub and Git

Featured Projects

- Tutorial on Web scraping craft brewery ratings from Beer Advocate with R and import.io
- Shiny app for gene expression analysis for bioinformaticians

Data Science Work Experience

- Data Scientist 2 at Simple Finance, (Oct. 2016 - Present)
 - Lead Data Scientist for the Onboarding product team: responsible for technical mentorship, data product strategy, external data integration with APIs and experimentation design and analysis (A/B Testing)

- Developed an early detection predictive model using feature selection with Gradient Boosted Models to monitor spikes in ACH returns leading to data-informed decisions for mitigating fraud loss partnered with the risk team
- Developed a rapid prototype using **r-shiny** and **flexdashboard** for performing power analysis
- Modeled causal impact with Bayesian structural time series techniques for fraud prevention and product feature launches
- Associate Data Scientist at The Hartford Financial Services, (April 2016 - Oct. 2016)
- Data Science Intern at The Hartford Financial Services, (Nov. 2015 - March 2016)
 - Research & Implementation of machine learning techniques in variable reduction and selection to develop predictive models for auto insurance that improve loss ratio estimates, drive strategic pricing changes and insights on competitive position.
 - Enhancing the team's data science architecture by developing and maintaining an internal R package, writing technical documentation and tutorials.
- Bioinformatics Internship at the University of Connecticut Institute for Systems Genomics (UConn), (Sept. 2015 - January 2016)
 - Computational and command line programming to develop a gene database for the annotation of the douglas-fir & walnut genome.
- Student Developer at Google Summer of Code, (May 2015 - Aug. 2015)
 - Developed a web application with **r-shiny** to automate differential expression and survival analysis of micro-array gene expression datasets from the NIH Gene Expression Omnibus

Education

- Graduate Analytics Certificate Candidate at DePaul University, (2015 - 2017)
- Bachelor of Science in Engineering in Biomedical Engineering at University of Hartford, (2008 - 2012)

Open Source R Software

- **gramr**: CLI wrapper for grammar checks in RMarkdown documents
- **ttbbeer**: Data package of beer statistics from U.S. Department of the Treasury (TTB)
- **shinyLP**: Bootstrap Components to make landing home pages for shiny web app
- **shinyGEO**: Shiny app for gene expression analysis

Talks

- Adventures in Crafting a Data Science Career | University of Rhode Island (URI) Coastal Institute and RhodyRStats “Careers in R” speaker series
- Extending Shiny by Enhancing User Experience with shinyLP | Portland, OR R User Group
- Open Government Data & Beer Analytics | Open Data Science Conference 2017 in Boston, MA

Research Publications

- Dumas J, Gargano MA, Dancik GM. shinyGEO: a web-based application for analyzing Gene Expression Omnibus datasets. *Bioinformatics*. 2016 Aug 8. | [Paper link](#)
- Dumas J, et.al., Feasibility of an electronic stethoscope system for monitoring neonatal bowel sounds. *Connecticut Medicine*, Volume 77, Number 8, pp. 467-471, September 2013. | [Paper link](#)