Alyssa Danielle Jones

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EDUCATION

The University of Texas at Austin, Austin, Texas
Bachelor of Science, Mathematics: Mathematical Sciences, Probability, Statistics, and Data Analysis, 2018 Major GPA: 3.05

General Assembly Developer Academy, New York, New York
Software Engineering Immersive, 2019

SKILLS AND RELEVANT COURSEWORK

Technical skills: Python, Django, Java, Spring Boot, PostgreSQL, BigQuery, React, HTML, CSS, Spring Boot, R, Git/Github, LaTeX

Coursework: Intro to Databases, Elements of Software Design, Mathematical Statistics, Bayesian Statistics, Stochastic Processes, Applied Statistics, Probability, Elements of Computer Science, Generalized Linear Models, Real Analysis, Risk Management.

EXPERIENCE

Recurser Recurse Center
March 2020 - Present Brookyln, NY

- Participating in community-driven educational programming retreat.
- Building a recipe scraping, tracking, and management web application.

Laboratory Technician Institute for Geophysics
2016 - 2018 Austin, TX

- Researched and implemented efficient machine learning algorithm for automated subglacial lake detection.
- Processed and cleaned ice-sounding radar data.
- Identified regions of potential hydrological activity using GIS software.

Undergraduate Research Assistant Institute for Geophysics
2010 - 2016 Austin, TX

- Tracked ice layers and measured thickness of the Antarctic ice sheet for NASA and NSF funded projects.
- Trained visiting research scientists and incoming students to use geophysical mapping software.

Research Assistant Laboratory for the Study of Anxiety Disorders
2010 - 2012 Austin, TX

- Oversaw health and wellness checks of laboratory animals.
- Collected skin conductivity and heart rate data from patients undergoing exposure therapy for spider and snake phobias.

PUBLICATIONS AND TALKS

Jones, A., Tansey, W., Greenbaum, J., Scott, J., Blankenship, D. *Subglacial lake detection via a discrete autoregressive change point analysis.* 2017 MAA MathFest, Chicago, Illinois.

Jones, A., Tansey, W., Greenbaum, J., Scott, J., Blankenship, D. *Subglacial lake detection via a discrete autoregressive change point analysis.* 2017 ASA Joint Statistical Meetings, Baltimore, Maryland.

Jones, A. *Approximating the genus of a graph.* 2015 UT Austin Department of Mathematics Directed Reading Program, Austin, Texas.

Young, D., Powell, E., Richter, T., Greenbaum, J., Gutowski, G., Greene, C., Ng, G., Kempf, S., Quartini, E., **Jones, A.**, Rosales, A., Blankenship, D. *Deep troughs dissect the Marie Byrd Land subglacial highland: Initial results of the GIMBLE survey.* 2013 WAIS Workshop, Sterling, Virginia.

AWARDS AND FELLOWSHIPS

American Express Developer Academy Fellowship

UT Austin Intellectual Entrepreneurship Pre-Grad Fellowship

UT Austin Orchestra Principal French Horn

PROJECTS

Lisp Parser:
github.com/AlyssaYelle/concepts-programming-languages *Python*

Spot the Stocks:
alyssayelle.github.io/stock-up/ *Java, Spring Boot, PostgreSQL*

Automated Ice Sheet Boundary Detection in Radar Images:
github.com/AlyssaYelle/auto-picking *Python, Scikitlearn, Numpy, Scipy*

A Tutorial on Random Processes:
github.com/AlyssaYelle/StochasticProcesses *Python, R, Numpy, Matplotlib*

Visualizing Austin Housing Rentals Over Time:
github.com/AlyssaYelle/RentalsDatabase *PostgreSQL, BigQuery, Python, Dataflow, Apache Beam, Tableau*