alyssayelle.github.io github: alyssayelle

EDUCATION

The University of Texas at Austin, Austin, Texas

Bachelor of Science, Mathematics, 2018

General Assembly Developer Academy, New York, New York

Software Engineering Immersive, 2019

SKILLS AND RELEVANT COURSEWORK

Technical skills: Python, Django, Java, Spring Boot, Javascript, PostgreSQL, Big-Query, HTML, CSS, Spring Boot, React, R, Git/Github, LATEX

Coursework: Software Design, Databases, Elements of Computer Science, Discrete Math, Mathematical Statistics, Bayesian Statistics, Stochastic Processes, Applied Statistics, Probability, Number Theory, 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.

AND TALKS

PUBLICATIONS 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 American Express Developer Academy Fellowship

FELLOWSHIPS

UT Austin Intellectual Entrepreneurship Pre-Grad Fellowship

UT Austin Orchestra Principal French Horn

PROJECTS

Lisp Parser:

github.com/Alyssa Yelle/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