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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, PostgreSQL, BigQuery, React, HTML, CSS, Spring Boot, 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<br/> 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