

Alyssa Danielle Jones

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210-606-8997

alyssayelle.github.io

EDUCATION	The University of Texas at Austin , Austin, Texas <i>Bachelor of Science</i> , Mathematics: Mathematical Sciences, Probability, Statistics, and Data Analysis, August 2018 Major GPA: 3.05												
SKILLS AND RELEVANT COURSEWORK	Technical skills: Python, SQL, Postgres, BigQuery, Tableau, R, L ^A T _E X, RadarFigure, QGIS 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, Financial Mathematics.												
EMPLOYMENT	<table><tr><td>Laboratory Technician June 2016 - May 2018</td><td>Institute for Geophysics Austin, TX</td></tr><tr><td colspan="2"><ul style="list-style-type: none">• Developed 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.</td></tr><tr><td>Undergraduate Research Assistant February 2010 - June 2016</td><td>Institute for Geophysics Austin, TX</td></tr><tr><td colspan="2"><ul style="list-style-type: none">• 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.</td></tr><tr><td>Research Assistant October 2010 - January 2012</td><td>Laboratory for the Study of Anxiety Disorders Austin, TX</td></tr><tr><td colspan="2"><ul style="list-style-type: none">• 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.</td></tr></table>	Laboratory Technician June 2016 - May 2018	Institute for Geophysics Austin, TX	<ul style="list-style-type: none">• Developed 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 February 2010 - June 2016	Institute for Geophysics Austin, TX	<ul style="list-style-type: none">• 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 October 2010 - January 2012	Laboratory for the Study of Anxiety Disorders Austin, TX	<ul style="list-style-type: none">• 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.	
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PUBLICATIONS	Jones, A. , Tansey, W., Greenbaum, J., Scott, J., Blankenship, D. <i>Subglacial lake detection via a discrete autoregressive change point analysis</i> . 2017 Joint Statistical Meetings, Baltimore, Maryland. Young, D., Powell, E., Richter, T., Greenbaum, J., Gutowski, G., Greene, C., Ng, G., Kempf, S., Quartini, E., Jones, A. , Rosales, A., Blankenship, D. <i>Deep troughs dissect the Marie Byrd Land subglacial highland: Initial results of the GIMBLE survey</i> . 2013 WAIS Workshop, Sterling, Virginia.												
PROJECTS	Automated Ice Sheet Boundary Detection in Radar Images: github.com/AlyssaYelle/auto-picking <i>Python, Scikitlearn, Numpy, Scipy</i> A Tutorial on Random Processes: github.com/AlyssaYelle/StochasticProcesses <i>R, Python, Numpy, Pandas, Matplotlib</i> Visualizing Austin Housing Rentals Over Time: github.com/AlyssaYelle/RentalsDatabase <i>SQL, Postgres, BigQuery, Python, Dataflow, Apache Beam, Tableau</i>												