

JULIAN SIA

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EDUCATION

The University of Texas at Austin May 2017

Masters of Science, Computer Science

Bachelor of Science, Computer Science

Bachelor of Business Administration, Finance and Business Honors

Dec 2015

- **Coursework:** Natural Language Processing, Information Retrieval, Deep Learning, Machine Learning, Mathematical Statistics
- **Honors:** Bachelor Diploma with Honors (Top 20% class rank) Computer Science and Finance, Phillips 66 Shield Scholar

WORK EXPERIENCE

Amazon - *Software Development Engineer; Seattle, WA* Jan 2019 - Present

Schlumberger Technology Corporation - *Cloud Software Engineer; Houston, TX* Aug 2017 - Dec 2018

- Extend backend Go APIs to enable user context management in Schlumberger DELFI portal
- Write scripts to build and deploy microservices via Google App Engine and configure release pipelines on VSTS
- Secure previously insecure outward-facing endpoints using Schlumberger's authentication and authorization framework

Sandia National Labs - *R&D Engineer, Intern; Albuquerque, NM* May 2016 - Aug 2016

- Write data crawlers and ingestors in Java to collect and store useful image data and metadata in proprietary Sandia system
- Formulated and implemented unsupervised learning algorithm analytics for Twitter data into Sandia system via Weka
- Develop visualizations for waveform transformer of seismic earthquake data using Cesium and React

The Boeing Company - *Data Scientist, Intern; Seattle, WA* May 2014 - Aug 2014 / May 2015 - Aug 2015

- Designed and implemented in Java experiments testing features engineered for first-order CRFs via CRFSuite
 - Designed and implemented k-means cluster features for vectors quantized as words (using word2vec and GloVE)
 - Achieved 0.93 F1 (harmonic mean of precision and recall) with dictionary, lexical Boolean, token, and window features.
- Integrated modular feature extractors and classifiers into pipelined, text classification system with Java

Union Pacific Railroad - *Systems Engineering Intern; Omaha, NE; Austin, TX* May 2013 - Nov 2013

- Leveraged SQUOP to fetch UP's Apache weblog data and Pig DML to parse and join access and metrics logs
- Performed statistical analysis and visualizations on time series data using R:
 - Developed scripts to measure speed of pulling service time-series data using RODBC from HDFS into R
 - Executed stepwise multivariate logistic regression to pinpoint high risk factors for at-grade rail crossing collisions

The University of Texas at Austin - *Graduate Teaching Assistant; Austin, TX* Aug 2016 - May 2017

- Teach basic logic and proof techniques to 60 students, grade assignments and examinations, provide general mentorship
- Selected by Professor Elaine Rich from the UTCS graduate student body (one of two) to teach freshman seminar logic course

SKILLS & PROFESSIONAL TRAINING

Languages Java, Go, Python (scripting and ML applications)

Tools Tensorflow, Keras, OpenCV, NumPy/SciPy, scikit-learn, Git, Bash, IntelliJ, Postman, Maven, Gradle,

PROJECTS

"Adaptive Resonance Networks" Fall 2016

- Formulated novel semi-supervised training objective to learn MNIST digits for convolutional neural network architectures
- Achieved 97.6% test accuracy on MNIST-test using < 20% of original training data (10k examples v. 55k examples).

"Project Palm" Fall 2014

- Wrote program to track hand and finger movement using Python, NumPy, and OpenCV
- Utilized skin detection algorithm to segment hand from background and convexity defects as proxies for fingers

Additional Information

Interests: Korean and Filipino cuisines, East Coast Swing and Two Step, Cooperative Housing

Work Status: US citizen