

ALEXANDER CLINES

SKILLS USED IN CURRENT ROLE*

PROGRAMMING LANGUAGES

- C/C++
- Python
- Objective C/C++
- Swift
- Java
- Bash/Shell

TECHNOLOGIES

- NumPy/Pandas/Notebooks
- Protocol Buffers
- PostgreSQL
 - Including administration
- Tableau
- Various AWS solutions
- Docker

*Technical Skills utilized in previous experiences as well as experience, projects and other research from before 2015 available upon request.

EXPERIENCE

Senior Software Engineer, Apple; Cupertino, CA — Aug. 2020 - Present

Member of the Siri NL Platform team that brought natural language processing to on device starting in iOS 15. I lead the performance effort for NL processing on device.

Software Engineer, Google; Mountain View, CA — July 2017 - Aug. 2020

SWE on an NLP team under Google AI Language focused on applying new NLP technologies towards various solutions for Google.

- Implementation of latest unsupervised clustering methods that were scalable for large datasets and distributed computing. Presented this work at an internal Google Research conference.
- Uncovered new applications of LSTM networks for Google Ads.
- Optimized large BERT models for production use (latency and memory usage mostly) using techniques including distillation.
- Designed/implemented or otherwise contributed to multiple core frameworks used internally for operating on NLP data including Sentiment Analysis models publicly accessible in Google Cloud.
- Acknowledged in the paper "[A Challenge Set and Methods for Noun-Verb Ambiguity](#)" which was published & presented at EMNLP in 2018 for my contributions to the dataset.

Software Engineer Intern, USAA; Plano, TX — Summers of 2015 & 2016

Two internships working on different products each summer.

- Contributed to the development of native mobile apps with Swift for iOS and Java for Android in addition to cross-platform technologies (Polymer) to allow users of all devices the opportunity to access a service provided by USAA.
- Worked on backend infrastructure for a mobile application, implementing a RESTful API using MySQL and J2EE technologies.

EDUCATION

Texas Tech University, Lubbock, TX

— Computer Science B.S. & Mathematics B.S. May 2017