# Jared Fernandez

□ 408-832-3234 | ☑ jared.fern@u.northwestern.edu | 🏕 jaredfern.github.io | ☑ JaredFern | 🛅 FernJared

# Education

Northwestern University

Sept. 2015 - June 2019

**B.S. IN COMPUTER SCIENCE WITH HONORS** 

GPA: 3.86/4.00, Major GPA: 3.91/4.00

B.S. IN ELECTRICAL ENGINEERING

**COURSEWORK:** Graduate Algorithms • Machine Learning • Artificial Intelligence • Deep Reinforcement Learning • Probabilistic Graphical Models • Statistical Language Models • Computer Vision • Medical Imaging • Networking • Databases • Digital Signal Processing • Probability • Linear Algebra • Differential Equations

# Experience\_

## Google, SOFTWARE ENGINEERING INTERN

June 2018 - Sept. 2018

- Improved handling of queries issued to Google Assistant and the Android Google Search App
- Designed and implemented visual interfaces to increase discoverability of offline functionality for Google Assistant on Android Auto

# Northwestern EECS, RESEARCH ASSISTANT

Jan. 2017 - Present

Principal Investigator: Doug Downey (WebSAIL Group)

- Investigating importance sampling for accelerating training of recurrent neural network language models
- Developed framework for efficiently sharing word embeddings online using compact signature representations

Principal Investigator: Thrasyvoulos Pappas

• Investigating image processing techniques to design metrics for measuring texture similarity and perform texture retrieval

# Northwestern EECS, TEACHING ASSISTANT

*March 2017 - June 2018* 

Courses Taught: Machine Learning, Artificial Intelligence, Discrete Math

• Graded course assignments and hosted weekly office hours to ensure understanding of concepts

#### **SLAC National Laboratory, Research Support Intern**

June 2015 - Aug. 2015

• Analyzed and created visualizations for x-ray diffraction patterns of high temperature superconductors

#### Stanford Earth Sciences, Research Intern

June 2013 - Aug. 2014

Principal Investigator: Kim Blisniuk

• Calculated slip rates on the San Andreas Fault with Beryllium isotope dating. Identified field locations for sample collection, and isolated samples for mass spectrometry.

# Publications.

- Jared Fernandez, Doug Downey. Sampling Informative Training Data for RNN Language Models. Association for Computational Linguistics: Student Research Workshop (ACL-SRW), 2018.
- 2. **Jared Fernandez**, Zhaocheng Yu, Doug Downey. VecShare: A Framework for Sharing Word Representation Vectors. Empirical Methods in Natural Language Processing (EMNLP), 2017.

# **Activities**

## Northwestern IEEE Student Chapter, EXECUTIVE BOARD

March 2016 - Present

EXTERNAL VICE PRESIDENT (2017-2018), TECHNICAL PROGRAM DIRECTOR (2016-2017)

- Led corporate outreach to coordinate industry representative appearances at tech talks & hackathons.
- Taught development and data analysis skills as project manager for machine learning and webdev teams.

#### Skills\_

**Programming:** Python • C • C++ • C# • Java • MySQL • Matlab • HTML/CSS **Packages & Frameworks:** TensorFlow • NumPy • Pandas • OpenCV • Android • Git • 上下X