Jared **Fernandez**

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Education

Northwestern University   *Sept. 2015 - June 2019*
B.S. in Computer Science & B.S. in Electrical Engineering   *GPA: 3.86/4.00, Major GPA: 3.93/4.00*
Coursework:

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

Skills

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

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 unsupervised models for image texture classification and retrieval
- Using statistical signal processing to design objective metrics for calculating texture similarity.

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

Activities

Northwestern IEEE Student Chapter, Executive Board   *March 2016 - Present*
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.

Publications

1. **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.