Jinjin Zhao

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EDUCATION

Princeton University, Bachelor of Science and Engineering   **June 2019 (est.)**
- **Major:** Computer Science, **Certificate:** Statistics and Machine Learning
- **GPA**: 3.71, **Departmental GPA (Completed):** 3.97
- **Selected Courses:** Advanced Natural Language Processing (COS597E) Economics and Computing (COS445), Distributed Systems (COS418), Analysis of Big Data (ORF350)

WORK EXPERIENCE

Research Intern, Princeton Plasma Physics Lab   **June 2018 - July 2018**
- Created and processed a database of experimental data from the DIII-D fusion reactor in San Diego
- Designed and optimized a multi-task neural network in TensorFlow to predict important temperature and electron parameters that influence fusion production capabilities
- Successfully estimated output predictions more accurate than those used in current computational models
- Plans to present work at 2018 APS conference in November

Software Engineering Intern, Facebook   **June 2017 - Aug. 2017**
- Designed an API in PHP/Hack that stores and downloads files (eg. logs and builds) during code execution
- Combined the API with a new MySql metadata database linked to Facebook's internal search framework
- Implemented a web interface using React to monitor and download files based on test runs
- Used to upload over 200 million log files per week, touching on most internal code development

Facebook University Intern, Facebook   **June 2016 - August 2016**
- Devised and built an independent Android app that generated in-app playlists based nearby concerts
- Implemented a music player with skip and pause functions that generated its own local database, and ran in a separate service environment to allow persistent function across the app

OTHER EXPERIENCE

Teaching Assistant, Independent Work Seminar   **Sept. 2018 - Present**
- Guided students during lectures on independent research projects in mobile computing design for assistive technology, which ranged from Android applications, data analyses, and computer vision projects

Student Technology Consultant, Digital Learning Lab   **Sept. 2016 - Present**
- Assisted peers and faculty with technical skills during lab hours, specializing in web development
- Planned a workshop on neural networks that introduced basic theory, applications and TensorFlow

Course Grader, Introduction to Machine Learning   **Sept. 2017 - Jan. 2018**
- Evaluated assignments on fundamental ML ideas such as convex analysis, and dimensionality reduction
- Demonstrated a high understanding of ML theory by composing solution guides for some assignments

PROJECTS

Image Recognition with Heterogeneous Datasets, Independent Work   **Jan. 2017 - May 2018**
- Modified a base neural network to accommodate different image datasets without preprocessing
- Used innovative technique to improve general neural network performance on smaller datasets
- Applied neural network structure onto MNIST, Google StreetView, and generated datasets for evaluation

Voice Synthesis through Deep Learning, Independent Work   **Sept. 2017 - Jan. 2017**
- Applied deep learning to audio files to change the identity of speakers without changing speech content
- Combined Google WaveNet and a conventional neural network to create a novel structure
- Demonstrated successful feature extraction, as well as successful end-to-end processing

ChatterWorks, YHacks 1&1 Prize Winner   **Nov. 2016**
- Created a chatbot with Python that had functions to manage 1&1's client databases in group scenarios

SKILLS

Software Languages: Python, Java, C, OCaml, Matlab, R

Technical Skills: Android, React, HTML/CSS, Github, Numpy, Pandas