Jinjin Zhao

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EDUCATION Princeton University, NJ June 2019 (est.)

> Computer Science, Bachelor of Science and Engineering GPA: 3.71 Statistics and Machine Learning, Certificate Major GPA: 3.97

RESEARCH Research Intern Princeton Plasma Physics Lab **EXPERIENCE** June 2018 - July 2018 Princeton, NJ

> Created and processed a database of experiments from the DIII-D fusion reactor in San Diego. Designed a multi-task neural network in TensorFlow to predict parameters that influence fusion production capabilities. Successful output predictions with higher accuracies than previous estimations. Neural

network to be implemented in current computational models.

Facebook University Intern

SOFTWARE **Facebook** Software Engineer Intern EXPERIENCE Seattle, WA

June 2017 - August 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 Facebooks internal search framework. Used to upload over 200 million log files per week, touching on most internal code

development.

June 2016 - August 2016 Menlo Park, CA Devised and built an independent Android app that generated in-app playlists

Facebook

based nearby concerts. Implemented a music player with its own local database running in a separate service environment. [Github]

OTHER COS 397/497 Teaching Assistant EXPERIENCE

Fall 2018 Princeton University Guided students on independent research projects in mobile computing design for assistive technology. Projects ranges from Android applications, data analyses, and computer vision projects.

Course Grader **COS324**

Fall 2017 Princeton University Evaluated course assignments for Introduction to Machine Learning on fundamental topics such as convex analysis, classification, and dimensionality

reduction.

Technology Consultant Digital Learning Lab September 2016 - Present Princeton University Assisted peers and faculty with technical skills while overseeing a lab with media equipment, specializing in web development.

CONFERENCE PRESENTATIONS Zhao, J., Kolemen, E., Li, X., & Laggner, F. (2018, Nov). Experimental Based Pedestal Prediction using Machine Learning. Poster session presented at the 60th Annual Meeting of the American Physical Society Division of Plasma Physics, Portland, Oregon. [pdf]

PROJECTS

Senior Thesis: Understanding Tokamak Pedestal Feature Space with Machine Learning. Extend previous work with feature and network optimization, comparison with other machine learning models, and evaluation of feature correlations. Further work to understand the feature space, and identification of outliers and corrupted data. (Advisors: Egemen Kolemen, Xiaoyan Li)

Image Recognition with Heterogeneous Datasets. Modified a base neural network to accommodate different image datasets without preprocessing, improving general neural network performance on multiple smaller datasets. Applied neural network structure onto MNIST, Google StreetView, and generated datasets for evaluation. (Advisor: Xiaoyan Li)

Voice Style Transfer through Deep Learning. Applied deep learning to audio files to change the identity of speakers without changing speech content for multiple speakers. Combined Google WaveNet and a conventional neural network to create a single end-to-end structure between audio files. (Advisor: Adam Finkelstien)

ChatterWorks, 2016 YHacks 1&1 Prize Winner. Created a chatbot with Python with text processing that managed 1&1s client databases in group scenarios.

SELECTED COURSEWORK Probability and Stochastic Systems, Fundamentals of Machine Learning, Advanced Natural Language Processing, Computer Networks, Distributed Systems, Functional Programming, Economics and Computing

CAMPUS ACTIVITIES Academic Tutor, Petey Greene December 2017 - May 2018 Volunteered with local prison to provide individualized tutoring for the GED high school exam.

| Treasurer, Green Princeton | October 2016 - May 2017 |
|----------------------------------|-------------------------------|
| Member, Green Princeton | September 2015 - May 2016 |
| Member, Frisbee Team | September 2016 - May 2017 |
| Dinning Hall Worker, Wilcox Hall | October 2015 - May 2016 |

SKILLS

Software Languages: Python, Java, C, OCaml, Go, Matlab, R Technical Skills: Android, HTML/CSS, Github, Numpy, TensorFlow