

Yiliang Shi

EDUCATION

- Master of Science, Computer Science (3.6 GPA)** *February, 2020*
Columbia University, New York, NY
- Bachelor of Science, Computer Science, Honors (3.8 GPA)** *May, 2018*
Minor in Mathematics
University of Utah, Salt Lake City, UT
- Bachelor of Science, Finance (3.8 GPA)** *May, 2018*
University of Utah, Salt Lake City, UT

Honors

- Columbia University Presidential Fellowship
- University of Utah Presidents Fellowship
- *Magna cum Laude*, honors program University of Utah
- CRA's Outstanding Undergraduate Research Award honorable mention
- Kiri Wagstaff ML/AL scholarship

SKILLS

Proficient Languages: Python, C#

Familiar Languages: Java, SQL, C/C++, Javascript/HTML/CSS

Used Frameworks: Keras, Tensorflow, Pytorch, Scikit-learn, Kubernetes, AWS, GCP, Git

ML/AI Techniques: SVMs, Regression, Clustering, PCA, Neural Networks (CNN, RNN, Yolo, Bert etc.)

EXPERIENCE

- Senior Software Engineer** *Linton Crystal Technologies, Rochester, NY* *November 2020 – current*
- Designed, implemented and released new analytics software for machine monitoring and control
 - Introduced first usage of neural networks and machine learning to company's analytics software
 - Performed anomaly detection analytics on time series and video data using C#, training in PyTorch and TensorFlow
- Machine Learning Engineer (Contract)** *Self-employed* *May 2020 – November 2020*
- Worked for variety of clients on contracts involving statistics and machine learning
 - Improved model accuracy for posture and role classification for LookDeep, Inc, Oakland, CA
 - Trained OCR and NLP models for email classification and entity recognition for Lawplus/AG Innovations Labs, Inc.
 - Advise engineers on the integration of machine learning into existing software
- Graduate Research Assistant** *Columbia University, New York, NY* *September 2018 – December 2019*
- Designed system architecture and SQL based API for a scalable system combining databases and machine learning analysis
 - Implemented machine learning system with Python with Tensorflow, Keras and Pytorch. Utilized CV and NLP
 - Worked with Google compute, Kubernetes and Helm
 - Presented research to technical and non-technical audience
 - Collaborated with external labs to train deep neural networks for computer vision.
- Undergraduate Research Assistant** *University of Utah, Salt Lake City, UT* *August 2017 – May 2018*
- Designed an interactive web-based visualization tool for topological analysis of brain networks through filtrations and persistent homology. Utilized HTML, Javascript, and CSS, as well as d3.js and tree.js.
- Software Development Intern** *MasterControl, Murray, UT* *May 2017 – August 2017*
- Developed document management system in Java, HTML CSS and Javascript in 6-member agile team.
 - Brief experience with Java Hibernate framework and Angular.js Javascript framework.
 - Followed the principles of software engineering and best practices, with emphasis on code discipline
- Undergraduate Research Scholar** *New Mexico State University, Las Cruces, NM* *June 2016 – August 2016*
- Examined how Linux kernel bugs impact commands sent at the device-interface level as part of an investigation into system bugs in the 2016 BigData NSF Undergraduate Research Program. Utilized Bash and C.

PUBLICATION

- Chen, Yiru, **Yiliang Shi**, Boyuan Chen, Thibault Sellam, Carl Vondrick and Eugene B Wu. "Deep Neural Inspection Using DeepBase.". (SysML), 2018
- **Yiliang Shi**, Danny V. Murillo, Simeng Wang, Jinrui Cao, and Mai Zheng, "A Command-Level Study of Linux Kernel Bugs". (ICNC'17 REUNS), 2017
- Simeng Wang, Jinrui Cao, Danny V. Murillo, **Yiliang Shi**, and Mai Zheng. "Emulating Realistic Flash Device Errors with High Fidelity." (NAS), 2016