Yiliang Shi

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Cell: 801-979-7953

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
- *Magma 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, C/C++, SQL, 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*
- Designing, implement, and test enhancements to process control software through the use of state-of-the-art image processing and machine learning techniques
- Designed high performance neural-network based system for state predictions using C# and ZeroMq
- Performed anomaly detection analytics on time series and video data

Machine Learning Engineer (Contract) *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* *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