WENXIN JIANG

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EDUCATION

Ph.D., Electrical and Computer Engineering, Purdue University, IN, USA *Aug 2020 - present*
GPA: **4.0/4.0**

Study Abroad Program, Engineering Physics, UC Santa Barbara, CA, USA *Mar 2019 - Jun 2019*
GPA: **3.8/4.0**

B.S., Applied Physics, Southeast University, Jiangsu, China *Aug 2016 - Jun 2020*

Relevant **Course Work**: Data Structure, Artificial Intelligence, Deep Learning, Software Engineering, Computer Network Systems, Operating Systems, Compilers, Computational Models&Methods

RESEARCH & WORK EXPERIENCE

Empirical Study on Computer Vision Reengineering, *GRA* *Jan 2021 - present*
- **Lead a team** of undergraduates, create a bug taxonomy, collect open-source bug reports, and analyze the dataset.
- Conduct a **case study** on TensorFlow Model Garden Team, collect reproducibility bugs, and propose best practices.

TensorFlow Model Garden Team (Google x Purdue), *ML engineer* *Sep 2021 - present*
- Reproduce YOLOX, mainly contribute to development and testing of the model architecture and component integration.

Preparation and Characterization of Charge-ordered Multiferroic Materials, *URA* *Jun 2020 - Nov 2018*
- Synthesize charge-ordered fluoride, characterize their structure, and measure other ferroelectric properties.

Experimental observation of Complex Kadomtsev-petviashvili Solitons, *RA* *Nov 2017 - Nov 2018*
- Formulate the experiment plan, carried out the numerical simulation by Matlab and Maple.

China Merchants Bank, *Intern* *Summer 2018*
- Work on data analysis and case studies for the Corporate Finance Division.

PROJECTS

Implement scanner, parser, optimizer and code generator of a **compiler** for a small programming language using **Java** and **ANTLR**, *Compiler course project* *Fall 2021*

Implement process synchronization, memory management, and file system using **C**, *OS course project* *Fall 2021*

Build customized dataset and data loader, and typical CV and NLP algorithms, using **Pytorch**, *DL course project* *Spring 2021*

Analyze three **ML testing** tools on TensorFlow program bugs, and write a literature review, *SE course project* *Spring 2021*

Implement data link, network layer routing and forwarding, reliable TCP transport, and client-server communication using **C and Python**, *Network course project* *Spring 2021*

Reproduce state-of-the-art weakly supervised instance segmentation models, using **Pytorch**, *AI course project* *Fall 2020*

Build a webpage of epidemic records with scraping and visualizing, using **Python, Flask**, *Personal project* *Spring 2020*

AWARD

*2nd Prize - **Vision Guided Robot** Competition, Southeast University* *Sep 2019*
***Distinction Award**, Southeast University* *Oct 2018*
3rd Prize - Structural Innovation Invitation Competition, Southeast University *May 2017*
Excellent Volunteer Award, Jiangsu Development Conference *May 2017*

SKILLS AND INTERESTS

Technical Skills: Python, Java, C\C++, Unix, Git, Mathematica, MATLAB
Libraries: Numpy, Pandas, MatPlotlib, TensorFlow, Pytorch
Languages: Mandarin (Native), English
Personal Interests: Photography, cooking, guitar