Ziyue "Alan" Xiang
Research Assistant

Graduate student researcher with experience in machine learning, specialized in using computer vision approaches to tackle media forensics problems.

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WORK EXPERIENCE

Research Assistant
VIPER Lab, Purdue ECE
Aug. 2020–Present

- Investigating reliable and cost-effective approach to counter deepfake and other types of media forgery technique that may bring substantial threat to the credibility of everyday information

Research Assistant
SOS+CD Lab, iSchool, Syracuse University
Aug. 2018–July 2020

- Developed automated tools for image manipulation detection in science
- Facilitated the application of an US ORI grant

Teaching Assistant
EECS, Syracuse University
Jan. 2020–May 2020

- Teaching assistant of CIS-375: Discrete Mathematics, lectured by Prof. Andrew C. Lee
- Participated in grading, hosting office hours, preparing recitation materials; Researched and experimented the transition to on-line learning during COVID-19 pandemic

EDUCATION

Ph.D. in Electrical & Computer Engineering
Purdue University, West Lafayette, IN
Aug. 2020–Present

MSc. in Computer Science
Syracuse University, Syracuse, NY
Aug. 2018–May 2020

BSc. in Information & Computing Science
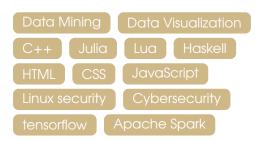Sun Yat-sen University, Guangdong, China
Sept. 2014-June 2018

- Best undergraduate thesis award

SELECTED PROJECTS

- Data-driven false-positive likelihood map for image reuse detection
- Scientific image tampering detection based on noise inconsistencies
- WPANTAP: virtual Linux network driver for IEEE 802.15.4 IoT device simulation
- Chinese lip-reading system based on RNN

SKILLS

Data Mining   Data Visualization

C++   Julia   Lua   Haskell

HTML   CSS   JavaScript

Linux security   Cybersecurity

tensorflow   Apache Spark

Key Skills

- Python
  - maximizing Python's performance with numpy, scipy as well as Cython and C++ extensions
- Machine learning (computer vision)
  - Understand the mechanism of most machine learning algorithms and the usage of major ML and CV toolkits
- LaTeX
  - Proficient with advanced TeX technologies such as LaTeX3 and LuaLaTeX

LANGUAGES

English   ■■■■□

Chinese(Mandarin)   ■■■■■

Cantonese   ■■■□■

TRAINING/CERTIFICATES

- Graduate teaching assistant training (2020)
- CITI Program–Responsible Conduct of Research (2019)
- CITI Program–Biomedical Research Investigators and Key Personnel (2020)

OTHER ACTIVITIES

ECS Global Graduate Ambassador–Orientation Leader
Syracuse University
Aug. 2019

- Organized orientation event for new Syracuse ECS international students
- Led a group of new foreign students in the scavenger hunt