

Skills

- **Language:** Python, Java, C, PHP, JavaScript, HTML, jQuery, Bootstrap, SQL
- **Database:** MySQL, SQL server
- **Software Framework:** Spring, Spring MVC, MyBatis, Laravel, Flask, NumPy, Tensorflow, PyTorch
- **Project Management:** Git/GitHub, Docker, Maven
- **Platform:** Web, Android App

Education

- Bachelor of Computer Science and Technology

School: Changshu Institute of Technology

GPA:3.79

Major: Computer Science and Technology

Graduate: June 2019

- Master of Software Engineering

School: Monmouth University

GPA:4.00

Major: Software Engineering

Graduate: December 2020

- PhD of Computer Science & Information

School: Temple University

GPA: -

Major: Computer Science & Information

Expected Graduate: May 2025

Publications

- F. Lan, S. Biswas, B. Gui, J. Wu and A. Wang, "Design and Implementation of a Strong Representation System for Network Policies", July 2022, ICCCN 2022
- F. Lan, B. Gui and A. Wang, "Fauré: A Partial Approach to Network Analysis", HotNet 2021
- B. Gui, F. Lan, and A. Wang, August 2021, "Sarasate: A Strong Representation System for Networking Policies", November 2021, Sigcomm 2021
- B. Gui, F. Lan, and A. Wang, "Flexible Routing with Policy Exchange", June 2021, APNet 2021
- W. Zhang, J. Wang and F. Lan, "Dynamic Hand Gesture Recognition Based on Short-Term Sampling Neural Networks", IEEE/CAA Journal of Automatica Sinica (Accepted)
- F Lan, "The Study of the Algorithm for the Prediction of Photovoltaic Power Based on LSTM and System Development" (Undergraduate Thesis - Chinese)
- F Lan, W. Zhang, X Ying, "An Indoor Positioning System Based on ZigBee and RSSI Ranging Algorithm", Software Guide, 2018, 17(2): 110-113. (Chinese)

Project experience

- **Pyotr: Tableau as a network representation for deep analysis** Jan. 2021 – current
Technique: Python, SQL, PostgreSQL
- **Fauré: A partial approach to network analysis** September 2021 – Dec. 2021
Project description: Fauré, a preliminary design in which a datalog extension (called fauré-log) for incomplete information is developed to enable loss-less modeling, and combined with static analysis of pure datalog to implement example relative-complete verifiers.
Technique: Python, SQL, PostgreSQL
- **Sarasate: A strong representation system for network policies** June 2021 – September 2021
Project description: we adopt conditional tables and the usual SQL interface (a relational structured developed for incomplete database) as a means to represent and query sets of network states in exactly the same way as a single definite network snapshot.
Technique: Python, SQL, PostgreSQL
- **Hand Gesture Recognition** September 2019 – Dec. 2020
Project description: It could recognize the dynamic hand gesture base on a webcam. The hand gesture types include swiping left, swiping right, swiping down, swiping up, pushing hand away, pushing hand in, turning

Somerset, NJ, 08873; +1 (848)- 466-9563; fangpinglan0116@gmail.com

hand clockwise, turn hand counterclockwise, thumb up, thumb down, shaking hand, drumming fingers, stop sign and so on.

Technique: Python, PyTorch, OpenCV, PIL, CUDA, 3D Convolutional Neural Network, Flask, HTML/CSS, JavaScript/jQuery

Training dataset: 20BN-jester Dataset V1

Project demo video: <https://youtu.be/gBE7cOssUbl>, <https://youtu.be/bSkLH-Ng0D8>

• **TimeMe—Time management tool** September 2019 – May 2020

Project description: A web application is developed to aid users with difficulty to manage their time.

Language: PHP, MySQL, JS

Software Framework: Laravel, vue.js

• **Photovoltaic power generation prediction based on LSTM** October 2018 – May 2019

Project description: Predicting the short-term or ultra-short-term photovoltaic power based on LSTM. This project has been applied into DAQUAN Research Institute.

Language: Python, HTML, JS

Software Framework: Flask

Algorithm: LSTM-RNN

Training dataset: the dataset of one-year history photovoltaic power and weather condition provided from DAQUAN Research Institute.

Work experience

• Research Assistant Sep. 2021 – current

Company: Temple University

• Research & Teaching Assistant Sep. 2019 – Dec. 2020

Company: Monmouth University

Algorithm competition experience

• Student Research Competition, Sigcomm 2021, August 23-27, 2021 Certificate of Recognition
• The 9th contest of LAN QIAO CUP the Second Prize Certification No.050902401

Honors

• National scholarship 2016 Fall-2017 Spring
• National scholarship for Encouragement 2017 Fall-2018 Spring

Scholarships

• The First Prize Scholarship 2015 Fall-2016 Spring CIT
• The First Prize Scholarship 2016 Fall-2017 Spring CIT
• The Second Prize Scholarship 2017 Fall-2018 Spring CIT
• The Second Prize Scholarship 2018 Fall-2019 Spring CIT
• Scholarship 2019 Fall MU
• The graduate research assistantship 2019 Fall MU
• Scholarship 2020 Spring MU
• The graduate research assistantship 2020 Spring MU
• The graduate teacher assistantship 2020 Spring MU