

# Shili Wang

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## EDUCATION

### **Carnegie Mellon University**

Pittsburgh, PA

- Master of Science in Computational Biology May 2021
- Core Courses: *Neural Computation, Advanced System Neuroscience. Computer vision, Machine Learning for Scientists*
- GPA: 3.48/4.0

### **Beihang University**

Beijing, China

- Bachelor of Engineering in Fluid Mechanics July 2019
- GPA: 3.7/4.0

## PROFESSIONAL SKILLS

- **Computer Skills:** MATLAB, C, Python, SQL, Go
- **Language:** Native in Chinese, Fluent in English

## WORK EXPERIENCE

### **Kuaishou Company**

Beijing, China

Data Analyst Intern

April 2019 – June 2019

- Applied SQL to process massive users' behavior data for the pattern recognition.
- Implemented various machine learning models such as xgboost to predict users' precise identities with 95% accuracy.

## RESEARCH EXPERIENCE

### **Biological Department, Carnegie Mellon University**

Pittsburgh, U.S

Research Assistant

Advisor: Professor Eric Yttri

February 2020 – February, 2021

- Applied wavelet analysis to track the motion features in the face of a mouse in a video.
- Used Lyon's model to get the acoustic features for the audio of a mouse.
- Utilized UMAP and Hdbscan to cluster the motion or acoustic features at different time points.

### **Functional MRI Center, University of California, San Diego**

San Diego, U.S.

Co-author & Programmer

Advisor: Professor Thomas. T Liu

July 2018 – Oct 2018

- Utilized a gated RNN (recurrent neural network)-based model, to identify individuals based on their resting-state fMRI data. Accuracy has reached 95%, far higher than the accuracy of 70% using brutal matching method.
- Applied various pattern tests to show that the RNN performance depends primarily on the data's spatial correlation.

### **Institute of System Structure, Beihang University**

Beijing, China

Co-author

Advisor: Professor Chao Tong

May 2018- July 2018

- Proposed a novel aircraft landing speed prediction model to accurately predict the landing speed of coming aircrafts.
- Analyzed and processed the QAR data by statistical method, elaborately designed the features by random forest algorithm. The experiment results suggested that the proposed model outperforms the state-of-art models.
- This paper has been published by Future Generation Computer Systems, November 2018.

## PUBLICATIONS

- Gangwu, Shuchang Zhou, Yujin Wang, Wenzhi Lv, **Shili Wang**, Ting Wang, A prediction model of outcomes of SARS-CoV-2 pneumonia based on laboratory findings. *Scientific Reports* 10, 14042(2020).

<https://www.nature.com/articles/s41598-020-71114-7>

- Chao Tong, Xiang Yin, **Shili Wang**, Zhigao Zheng, A novel deep learning method for aircraft landing speed prediction based on cloud-based sensor data, *Future Generation Computer Systems*, Volume 88, 2018, Pages 552-558, ISSN 0167-739X, <https://doi.org/10.1016/j.future.2018.06.023>.