

# **Yuling (Daniel) Shi**

Email: shiyuling@163.sufe.edu.cn | Mobie: (86) 187-7023-2576 | Web: yerbapage.github.io  
Address: No.777 Guoding Road, Yangpu District, Shanghai, P.R.China 200433

## **EDUCATION**

### **Shanghai University of Finance and Economics**

*Department of Mathematics*

Shanghai, China

Sept 2018 - Present

- Undergraduate in Applied Mathematics, GPA in the past year: **3.72/4(88.9/100)**, Courses on AI taken with current seniors: Natural Language Processing (4.0), Deeping Learning (4.0), Machine Learning (3.7).
- Awards: People's Scholarship, Outperforming Individual Scholarship (2/86), Featured Student (2/86).
- Solid expertise in: Python (Deep Learning, Scientific Computing), MATLAB, Bash, L<sup>A</sup>T<sub>E</sub>X, Git; experienced in: C, C++, CMake, Javascript, SQL, SPSS.
- Team working: President of school table tennis club, caption of school table tennis team,

## **PUBLICATIONS**

- [1] Xuehai Huang, **Yuling Shi**, Wenqing Wang: A Morley-Wang-Xu element method for a fourth order elliptic singular perturbation problem. (*accepted by Journal of Scientific Computing*)

## **RESEARCH EXPERIENCE**

### **Research Assistant, Finite Element Method**

Shanghai, China

*Advisor: Prof. Xuehai Huang*

Jul 2020 - Present

- Studied scientific computing package skfem in Python and iFEM in MATLAB for finite element method.
- Contributed codes and reported bug for an open source package scikit-fem when implementing experiments.
- accepted by Journal of Scientific Computing.

### **Research Assistant, Interpreting Predictions of NLP Models**

Shanghai, China

*Advisor: Dr. Wanyun Cui*

Jan 2021 - Present

- Developed XYZ using XYZ that led to X% improvement.
- Led an initiative XYZ to identify the root cause.
- Collaborated with XYZ team to work on XYZ feature.

### **Project Leader, Building Knowledge Graph with Deep Learning Models**

Shanghai, China

*Advisor: Prof. Xuehai Huang*

Feb 2020 - Jun 2020

- Applied NLP models to build a financial knowledge graph, studied models for named entity recognition, relation extraction and event extraction.
- Collected data with Scarpy, stored the data in Neo4j graph database and wrapped it up with Flask framework.
- Added labels to original sentences and included a BiGRU layer after BERT to improve the performance in named entity recognition task, implemented with Pytorch.
- Awarded as "Excellent Project" in school and selected for oral presentation (**3/165**).

### **Project Leader, Kaggle Question Answering Competition**

Shanghai, China

*Advisor: Ass.Prof. Hui Fang*

Feb 2020 - Jun 2020

- Ensembled models and improved training process learning from latest deep learning research papers to improve BERT and similar models in question answering task.
- Outperformed the best submission in Kaggle leaderboard with smaller models. Implemented technics in Pytorch including: pre-training on similar dataset, hard negative mining, adding special token, mixed precision training.
- Reached a final GPA of 4.0 as a second year student among juniors from experimental class in Department of Electrical Engineering.

## **ACITIVTIES AND HONORS**

### **1<sup>st</sup> Prize in Mathematical Contest in Modeling of SUFE (Ranked 2/70)**

Apr 2020 – Apr 2020

- Adopted machine learning and optimization models to analyze effects and duration of online courses.

### **President of School Table Tennis Club (300+ members)**

Sept 2019 – Aug 2020

- Held competitions within and between schools, led outing activities and managed regular activities of the club.

### **1<sup>st</sup> Prize in National Olympiad in Physics (Jiangxi Area, top 0.01%)**

Sept 2016 – Sept 2017

- Self-studied undergraduate and graduate courses in Physics during high-school with strong motivation and ability to learn.

#### **OTHER SKILLS**

**Language:** English (TOFEL 102), Chinese (mother language)

**Interests:** Table tennis ( $5^{th}$  place in Shanghai Championship Doubles,  $3^{rd}$  place in Teams)