

## Education

- Sep 2020 – Jun 2023 (expected) **Master Candidate**, Cyberspace Security, Fujian Normal University, Fuzhou, China. GPA : 87.88/100.  
Research interests : Federated Learning, Edge Computing and Privacy.  
Advisor : Prof. *Hui Lin* and Prof. *Xiaoding Wang*.
- Sep 2016 – Jun 2020 **Bachelor**, Computer Science and Technology, Hunan University of Science and Technology, Xiangtan, China, GPA : 3.34/4.0.

## Publications

- > **Feng Yu**, Hui Lin, Xiaoding Wang, et al. Blockchain-empowered secure federated learning system : Architecture and applications[J]. Elsevier Computer Communications, vol. 196C, 2022, pp. 55-65.
- > **Feng Yu**, Hui Lin, Xiaoding Wang, et al. "Communication-Efficient Personalized Federated Meta-Learning in Edge Networks", submitted to IEEE Transactions on Network and Service Management (TNSM), Under review, 2022.
- > **Feng Yu**, Qingxin Lin, Hui Lin, Xiaoding Wang, Privacy Enhanced Federated Learning Scheme based on Generative adversarial networks. Chinese Journal of Network and Information Security, Under review, 2022.
- > Ankita, Shalli Rani, Moayad Aloqaily, Syed Hassan Ahmed Shah, Rohit Sharma, **Feng Yu**, "An Efficient Hybrid Deep Learning Model for Denial of Service Detection in Cyber Physical Systems", submitted to IEEE Transactions on Network Science and Engineering (TNSE), Minor revision, 2022.
- > Qingxin Lin, Kuai Xu, Yikun Huang, **Feng Yu**, Xiaoding Wang, "Privacy-Enhanced Data Fusion for Federated Learning Empowered Internet of Things", Mobile Information Systems, vol. 2022, Article ID 3850246, 8 pages, 2022.
- > Jianmin Liu, Hui Lin, Adnan Zahid, Xiaoding Wang, **Feng Yu**, "GSAA : A Novel Graph Spatiotemporal Attention Algorithm for Traffic Prediction in Computing Power Network", To be submitted to Digital Communications and Networks, 2022.

## Patents and Software

- > **Feng Yu**, Hui Lin, Xiaoding Wang, A new type of sports hairband [P]. Utility model patent, Fujian Province : CN214904410U, 2021-11-30.
- > Jieyu Yang, Lei Jiang, **Feng Yu** et al., "LSTM-based article intelligent generation system", Computer Software Copyright, Hunan University of Science and Technology, 2019SR1143843.
- > Bowei Zhang, Wenhua Song, Xiaoliang Wang, **Feng Yu**, "Kuang-Chi Security Cloud Monitoring and Early Warning System for Meeting Cars on Curves", Computer Software Copyright, 2019SR0274946.
- > Qian Chen, Qiongbao Zhang, Jieyu Yang, **Feng Yu** et al., "Hele Yiren Pilot Mutual Assistance Platform", Computer Software Copyright, Hunan University of Science and Technology, 2019SR0545706

## Projects and Experiences

- |                              |  |
|------------------------------|--|
| <p>Sep 2022<br/>Jun 2022</p> | <p><b>Software Development Intern, Lenovo Computer Technology Co. LTD, Shanghai</b></p> <ul style="list-style-type: none"> <li>&gt; Responsible for ESXI VM and LXCA installation automation script programming; Familiar with Git, Maven, Jenkins, shell and PowerShell script syntax;</li> <li>&gt; Learn the BMC, IPMI, Redfish, LXCA platforms, and the use of Jira and Bugzilla; Master LXCA CFC project back-end code workflow, solve several bugs in CFC project;</li> <li>&gt; Build CFC Server prompt functionality with the Dojo framework; Lean the programming and development of Server Configuration Pattern function module;</li> <li>&gt; Design and create the <b>log platform</b> based on ELK and Kafka cluster (3 nodes), and further optimize Kafka performance.</li> </ul> <div style="display: flex; gap: 5px;"> <span>Shell/Java/Python/Web programming</span> <span>BUG fix</span> <span>Log platform</span> </div> |
| <p>Jun 2020<br/>Dec 2019</p> | <p><b>Application of recommendation algorithm based on RL, HNUST, Undergraduate Graduation Thesis</b></p> <ul style="list-style-type: none"> <li>&gt; Develop the collaborative algorithms via matrix factorization and bandit algorithms;</li> <li>&gt; Apply Python to extract preference features from movie data and propose a novel recommendation algorithm based on the idea of gambling machines.</li> </ul> <div style="display: flex; gap: 5px;"> <span>Python</span> <span>Reinforcement Learning</span> <span>Recommendation algorithm</span> <span>Collaborative Filtering</span> <span>Bandit algorithm</span> </div>  |
| <p>May 2019<br/>Jun 2018</p> | <p><b>Service account development, HNUST, Team leader</b></p> <ul style="list-style-type: none"> <li>&gt; Participate in the back-end development of the <b>College's Alumni Association service account</b>;</li> <li>&gt; Responsible for the back-end development, front-end and back-end test docking and service launch of the <b>Waku Yiren pilot mutual aid service account</b>.</li> </ul> <div style="display: flex; gap: 5px;"> <span>Java/Web programming</span> </div>   |

Oct 2018	Text Intelligence Challenge, Dagan Data, Team member
Jul 2018	
	<ul style="list-style-type: none"> <li>&gt; Build a model to predict the category of text through the body of long text data;</li> <li>&gt; Apply machine learning algorithms (such as SVM, TF-IDF, XGBoost, etc.), and obtain a <b>Top 10% score</b>.</li> </ul>
	<div>Python</div> <div>SVM</div> <div>TF-IDF</div> <div>XGBoost</div> <div>Ensemble Learning</div>
Jun 2018	ACM-ICPC training team, HNUST, Team member
Dec 2016	
	<ul style="list-style-type: none"> <li>&gt; Master <b>basic data structure</b>, such as stack, queue, linked list, binary tree, graph, and lookup set, tree array, line tree, bisect graph, etc.</li> <li>&gt; Master <b>basic algorithms</b>, such as dichotomy, DFS, BFS, dynamic programming, shortest path algorithm, etc.</li> </ul>
	<div>Data Structure</div> <div>Algorithm</div> <div>C++</div> <div>Java</div> <div>Python</div>

## Teaching

- > Computer Networks, Teaching Assistant, 2020.09 – 2021.01.
- > Programming Experiment (**Data structure** and **C/C++ programming**), Teaching Assistant, 2017.09 – 2019.06.
- > Advanced Mathematics and Professional Basic Courses, Assistant Class Teacher, 2017.09 – 2018.06.

## English Language

College English Test Band 4 : 489    IELTS : 6.5  
College English Test Band 6 : 432

## Skills

**Programming Language :** C/C++, Python, Golang, Java, SQL, HTML, CSS, JavaScript, Bash.  
**Frameworks & Tools :** Git, PyTorch, TensorFlow, FATE, FedLab, Flower, FISCO BCOS, Numpy, Pandas, Scikit-learn, CUDA, Flask, Elasticsearch, Logstash, Kibana, Kafka, SpringBoot, React, Angular, Docker, Redis.  
**Certificates :** Intermediate Software Designer, CCF Certified Software Professional **Top 10%**, Sep 2018.

## Main Honors and Awards

2022    **Second-class Academic Scholarship** of Fujian Normal University.  
2020    **Outstanding Graduate** of Hunan Province (2%, 10/491), Outstanding Graduate of HNUST (2%).  
2020    **Outstanding Undergraduate Graduation Thesis** of College.  
2017 & 2019    **National Encouragement Scholarship** (twice), **Outstanding Student Leader** of HNUST.  
2017 - 2019    **First prize** of HNUST (twice), **Second prize** of HNUST, **Merit Student** of HNUST (twice), **College Merit Student Model**.  
2018    **Third prize** in Hunan Division of "Ladder Competition" of Chinese universities.  
2018    **Second prize** of "Lanqiao Cup" Hunan Province (twice, C++ and Java).  
2018    **Bronze Prize** of CCPC Invitational Competition and the 10th Xiangtan Program Design Competition.  
2018    **First prize** of National College Students Electronic Creative Innovation Competition in the national preliminary competition, **Second prize** in the final competition.  
2017    **Second prize** in Undergraduate programming competition of HNUST.  
2015    **Second prize of Hubei Province** in National Mathematics League for High School Students.

## Interests

**Sports :** Running, Climbing, Badminton, Table Tennis, Basketball, Extreme Sport.  
**Misc :** Travelling, Writing and Learn new technologies, such as federated learning, continual learning, generative adversarial network, deep reinforcement learning, meta learning, recommendation system and related applications.