# Feng Yu

## Ph.D. candidate in Computer Science

## **Education**

Sep 2020 – Jun 2023(expected) Master Candidate, Cyberspace Security, Fujian Normal University, Fuzhou, Fujian.

Research interests: Privacy Protection, Federated Learning and related applications.

Advisor: Prof. Hui Lin and Dr. Xiaoding Wang.

Sep 2016 – Jun 2020 Bachelor, Computer Science and Technology, Hunan University of Science and Technology,

Xiangtan, Hunan GPA: 3.3/4.0, TOP 15%

## Publications

> 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.

- > <u>Co-author</u>, "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), <u>Minor revision</u>. 2022.
- > Jianmin Liu, **Feng Yu**, Hui Lin, Xiaoding Wang, "SAGTR-A Sample and Aggregate Graph Spatial Temporal Network for Traffic Prediction", <u>To be submitted</u>, 2022.
- > Feng Yu, Hui Lin, Xiaoding Wang, et al. Blockchain-empowered secure federated learning system: Architecture and applications[J]. Computer Communications, vol. 196C, 2022, pp. 55-65.
- > 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, Accepted, 2022.
- > <u>Co-author</u>, "Privacy-Enhanced Data Fusion for Federated Learning Empowered Internet of Things", Mobile Information Systems, 2022
- > As a Contributor to Federated Learning for Future Intelligent Wireless Networks included in Deep Federated Learning Based on Knowledge Distillation and Differential Privacy edited by Yao Sun, Chaoqun You, Gang Feng, and Lei Zhang. 2022
- > Feng Yu, Hui Lin, Xiaoding Wang, A kind of sports hairband [P]. Utility model patent, Fujian Province: CN214904410U,2021-
- > **Co-author**, Three Software Copyrights, 2018.

# Teaching

- > Computer Network, Teaching Assistant, 2020.09 2021.01.
- > Programming Experiment (**Data structure** and **C++ programming**), Teaching Assistant, 2017.09 2019.06.

# Projects & Experiences

#### Sep 2022 Jun 2022

#### Software Development Intern, Lenovo Computer Technology Co. LTD, Shanghai

- > Familiar with Git, Maven, Jenkins, shell and PowerShell script syntax, responsible for ESXIVM and LXCA installation automation script programming;
- > Understand the BMC, IPMI, Redfish and LXCA platforms, and understand the use of Jira and Bugzilla; Familiar with LXCA CFC project back-end code workflow, solve several bugs in CFC project;
- > Learn about the Dojo framework, Web programming: Add CFC Server prompt functionality; Understand the programming and development of Server Configuration Pattern function module;
- > Understand ELK, Kafka; **Log platform deployment** and Kafka performance optimization based on ELK+Kafka cluster (3 nodes);

Shell/Java/Python/Web programming BUG fix Log visualization module design

#### Jun 2020 Dec 2019

### Application of recommendation algorithm based on RL, HNUST, Undergraduate Graduation Design

- > Python is used to extract preference features from movie data and apply it to recommendation;
- > The collaborative filtering algorithm is realized by matrix factorization, and recommendation is achieved by Bandit algorithm.

Reinforcement Learning | Recommendation algorithm | Python

#### May 2019

#### Service account development, HNUST, team leader

Jun 2018

> Participate in the back-end development of the **College's Alumni Association service account**;

Responsible for the back-end development, front-end and back-end test docking and service launch
of the Waku Yiren pilot mutual aid service account

Java/Web programming

Jun 2018 Dec 2016

ACM-ICPC training team, HNUST, team member

> Master basic data structure, such as stack, queue, linked list, binary tree, graph, and lookup set, tree array, line tree, bisect graph, etc.

> Master basic algorithms, such as dichotomy, DFS, BFS, dynamic programming, shortest path algorithm, etc.

Data Structure | Algorithm | C++ | Java | Python |



# 🄼 Languages

English: Reading CET-4:489 • 0 0 CET-6:432 Writing Listening **IELTS: 6.5** 

Speaking  $\bullet \bullet \bullet \circ \circ$ 

# **Skills**

Programming Language: C/C++, Python, Golang, Java, SQL, HTML, CSS, JavaScript, Bash.

Git, PyTorch, Numpy, Pandas, Scikit-learn, CUDA, Flask, ElasticSearch, Logstash, Kibana, Frameworks & Tools:

Kafka, SpringBoot, React, Angular, Redis.

Certificates: Intermediate Software Designer

## Selected Honors & Awards

2022 **Second-class Academic Scholarship** of Fujian Normal University.

2020 Outstanding Graduate of Hunan Province, Outstanding Graduate of HNUST.

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.

First prize of National College Students Electronic Creative Innovation Competition in the national preliminary 2018 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.

Travelling, Writing and Learn new technologies, such as federated learning, continual learning, generative adversarial Misc: network, deep reinforcement learning, recommendation system and related applications.