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.
- > 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. 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, An athletic headband, Chinese Patent. 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 Jun 2018

Service account development, HNUST, team leader

- > 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

ACM-ICPC training team, HNUST, team member

Dec 2016

- > 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

Speaking

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

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Skills

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

Frameworks & Tools: Git, PyTorch, Numpy, Pandas, CUDA, Flask, ElasticSearch, Logstash, Kibana, Kafka, Redis.

Certificates: Intermediate Software Designer

Selected Honors & Awards

Second-class Academic Scholarship of Fujian Normal University. 2022

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.

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.

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