Yuqi Zhao

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EDUCATION

Beijing University of Posts and Telecommunications

Sept. 2020 – June. 2023(Expected)

Master of Engineering, Computer Science and Technology

Supervisor: Prof. Xiaohong Huang

• GPA: 85/100

• Award: Outstanding Postgraduate student, First-class scholarship (2021, 2022).

Queen Mary University of London

Sept. 2016 – June. 2020

Bachelor of Science (Engineering) with First Class Honors

• Joint Bachelor Degree Programmes with Beijing University of Posts and Telecommunications

Beijing University of Posts and Telecommunications

Sept. 2016 - June. 2020

Bachelor of Management, E-Commerce Engineering with Law

Minor in Internet of Things Engineering

• GPA: 86.06/100 (16/171)

• Relevant Courses: Data Structures (91), Internet Protocols (92), Security and Authentication (95).

• Award: Outstanding Undergraduate, Second-class scholarship (2017, 2019).

RESEARCH EXPERIENCE

A Cluster-Asynchronous Federated Multi-Task Learning (Master Thesis)

Dec. 2021 – Now

Federated learning enables training devices to learn a shared model together while keeping all training data on the devices to protect data privacy. (**Paper in submitting**)

- Mitigating model accuracy degradation due to data heterogeneity through multi-task learning;
- Mitigating the problem of excessive time consumption due to device heterogeneity by asynchronous training

PROJECT EXPERIENCE

Federated Learning System Based on Consortium Chain

May. 2021 – *May.* 2022

Based on the data privacy protection of federated learning, combined with the decentralization, data immutability, and user authentication of consortium chain, design and implement a reliable and secure federated learning system.

- Coordinate work as a team leader;
- Deploy Consortium chain distributed;
- Development of Consortium chain chaincode and upper layer interface;
- Combination of federated learning and Consortium chain.

Active Measurement System Based on IPv6

Dec. 2020 - May. 2021

Active measurements system (e.g., delay, jitter, ipv6 support score, etc.) are performed by probe devices to assess current IPv4/IPv6 networks.

- Coordinate work as the team leader:
- Implement the network measurement function;
- Implement the ipv6 support measurement for websites.
- Implements the probe authentication, scheduling, and control function;

A Mobile App for Collecting Network Measurement Data (BSc Thesis)

Dec. 2019 – May. 2020

Supervisor: Gareth Tyson (QMUL)

An Android App can measure the user's surrounding network conditions and display the results to the user in data visualizations.

- Measure basic network information, bandwidth, and delay;
- Test device connectivity and DNS resolution;
- Implement data visualization.

TEACHING EXPERIENCE

Teaching Assistant for Internet Application

Mar. 2021 – Jul. 2021

This course is an all-English course, which mainly explains application layer protocols and cutting-edge knowledge.

- Implement and Display experimental demo (FTP client and server by C);
- Answer and guide students to learn and write relevant codes.

SKILLS

• Python, Java, C, MySQL, Pytorch, Docker, and IELTS (6.5).