# Yuqi Zhao

zhaoyuqi@bupt.edu.cn | 10 Xitucheng Road, 100876, Beijing, China

#### **EDUCATION**

## **Beijing University of Posts and Telecommunications**

Sept. 2020 – June. 2023

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 – June. 2023

Federated learning enables training devices to learn a shared model together while keeping all training data on the devices to protect data privacy.

- 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.