



Guanran Tai

☎ (+45) 52658846

Date of birth: 04/09/1999

Gender: Male

✉ Email address: sxd548@alumni.ku.dk

✉ Email address: taiguanran@gmail.com

EDUCATION AND TRAINING

Master of Computer Science

University of Copenhagen [01/09/2021 – Current]

Address: Nørregade 10, 1165 Copenhagen (Denmark)

<https://www.ku.dk/>

Bachelor of Computer Science and Technology

University of Electronic Science and Technology of China [01/09/2017 – 30/06/2021]

Address: Xiyuan Ave, West Hi-Tech Zone, 611731 Chengdu (China)

<https://www.uestc.edu.cn/>

WORK EXPERIENCE

University research assistant

Institute of Fundamental and Frontier Science, UESTC [01/09/2018 – 01/09/2019]

City: Chengdu

Country: China

- Analysed appropriate methods to utilize and express the collected information, to make decisions in an uncertain environment since there is a certain probability that the data collected by radar, infrared, and other sensors will be superimposed, or even missing, which cannot be expressed by traditional probability theory.
- Selected Basic Probability Assignment (BPA) to represent information and to train samples, combined the attribute data of the data set, respectively calculated the BPA of a certain attribute of the sample, and then obtained the BPA of the sample according to the information fusion rules, fully utilized the information of the sample, and avoided interference brought by partial attribute value missing or errors.
- Improved the classification effect based on a new distance rule for measuring BPA and its application to a new evidence decision tree.

PROJECTS

A Go Online Judgement Platform

- A Golang language learning system that enables teachers and administrators to manage, assign homework, and students to submit assignments and assessment results on the system.
- The frontend is based on React (a JavaScript frontend framework), the backend is based on Gin(a go backend framework) and the database is based on MySQL.
- Asynchronous return of assessment results based on web socket technology.

A C++-based file compression and backup system

- A C++-based file compression and backup system with functions for compressing, decompressing, packing and unpacking files and folders. The function for compressing and decompressing is based on the Huffman Coding.
- GUI implementation based on Qt.
- Implemented decryption, encryption and linking to cloud drives for regular backups.

Completing a STL-compliant HashMap

- Implementing an STL-compliant HashMap based on a CS106L course project.
- Make a const-interface for the HashMap class, and design and implemented the special member functions for the HashMap function to make it STL-compliant.
- Using the Unit test to test its correctness. And by running the test of the benchmark, the HashMap has better performance than the `std::unordered_map`.

A load balancer based on Rust

- Use the Tokio library for making the request and response function asynchronously to gain the better performance.
- Implement active HTTP health checks for the load balancer.
- By using the fixed time window to implement the rate limiting feature.

SOCIAL AND POLITICAL ACTIVITIES

Vice President at Microsoft Student Club, UESTC

[01/06/2018 – 15/06/2019]

- Organized a Hackathon initiated by Microsoft Research Asia among universities in Southwest China; coordinated with leaders in Microsoft, Sichuan University, and Chongqing University about regional publicity matters, and determined the theme and content of the event.
- Covered a wide range of participants from high school students to graduate students; arranged catering and tea break in the venue during the competition, provided a platform for students to communicate with each other, emerged many creative demos from the event.
- Awarded Star of the Club by Microsoft Research Asia; the club also won the Excellent Operation Award that year.

HONOURS AND AWARDS

Merit Student Scholarship

UESTC [09/2018]

Star of the Club, Microsoft Student Club

Microsoft Research Asia [06/2019]

Merit Student Scholarship

UESTC [09/2019]

Merit Student Scholarship

UESTC [09/2020]