

Education

Fudan University

GPA: 3.70/4.0, Rank: 6% (11/174)

Sep 2019 - Jun 2023, Shanghai, CN

Undergraduate, Computer Science

University of California, San Diego

GPA: 3.93/4.0, Tuition sponsored by the UCEAP program

Sep 2021 - Dec 2021, La Jolla, US

Exchange, Computer Science and Engineering

Publication

Locating CDN Edge Servers with HTTP Responses

ACM SIGCOMM Demo

Run Huang, Mengying Zhou, Tiancheng Guo, Yang Chen, In Proc. of ACM SIGCOMM 2022 Demos and Posters

1st place in the Student Research Competition; Poster presentation at SIGCOMM '22

[Paper] [Website] [Video]

Research

HTTP-Based CDN Identification & Geolocation

Shanghai Key Lab of Intelligent Information Processing

- Analyzed terabytes of telemetry data from 229 vantage points using K-Means and TF-IDF. Trained a Random Forest Classifier to geolocate Anycast CDN servers based on network latency with an f1 score of 0.88
- Uncovered geographic hints embedded in the HTTP headers of 20 CDNs and their corresponding geolocations
- Created [lucedge](#), a tool for identifying the vendor and geolocation of CDN servers. Over 1.7k downloads on npm

Measuring 0-RTT Resumptions in Public CDNs

Mobile Systems and Networking Group, Fudan Univ.

- Clustered HTTP/3-enabled websites based on the number of overlapping URLs. Built automated probes with Puppeteer and Xfce to iteratively crawl websites in batches and trigger 0-RTT connection resumptions
- Built a plugin for parsing and compressing Chrome's Netlog data, leading to 70% savings in data transfer

ARamsay: an Augmented Reality Cooking Assistant on HoloLens

Design Lab, UC San Diego

- Developed an AR recipe application to provide a more hygienic and enjoyable "touch-free" culinary experience for people interested in cooking using Unity 3D and Mixed Reality Toolkit
- Designed simple and intuitive gestures for users to interact with the recipes

[Report] [Website] [Video] [Code]

Awards & Grants

Gold Medal, ACM SIGCOMM '22 Student Research Competition

Association for Computing Machinery, Aug 2022

Tencent Cloud Research Fellowship

Tencent Holdings Ltd, May 2022

Second Prize (15%), Third Prize (25%), and \$3000 Study Abroad Scholarship

Fudan University, {2020, 2021, 2022}

Industry & Projects

Frontend Engineer Intern @ Siemens

Sep 2022 - Present, Shanghai, CN

- Delivered 5+ new features using Three.js and React for the sketch function of Siemens NX web application, an industry-leading 3D Computer-Aided Design software used by NASA, Boeing, SpaceX, etc.
- Improved the rendering and editing performance by integrating WebAssembly compiled from the server-side code into the frontend, allowing some computational tasks to be done locally and avoiding network latency

Unicamp, Roadmaps for Self-taught CS (Frontend team)

Oct 2022 - Present, Shanghai, CN

- Developing a learning platform with React and Emotion, allowing people aspiring for a career in the tech industry to find quality online courses and discuss their progress/experience in self-learning CS
- Optimized page load time by 11% using lazy loading, infinite scroll, code splitting, and preload

Skills & Tools

[Languages]: Javascript / Python / C++ / English (TOEFL: 113) / Cantonese; [Design & Frontend]: React / Unity 3D / Figma / D3.js / Sass / Three.js / Mixed Reality Toolkit; [Testing & Backend]: Node.js / Express.js / Puppeteer / Docker