Chenxi (Cecilia) Yang

CONTACT INFORMATION

Department of Computer Science
The University of Texas at Austin
Austin, TX, 78751

(+1) 512-960-6965
https://cxyang1997.github.io/
cxyang@cs.utexas.edu

EDUCATION

Fudan University, Shanghai, China — *Sep. 2015 - Jun. 2019*
B.Sc (Outstanding Student Honor Program), School of Computer Science

- GPA: **3.62 /** 4.0, School Ranking: **6 /** 111
- Major GPA: **3.77 /** 4.0

The University of Hong Kong, Hong Kong — *Aug. 2017 - Dec. 2017*
Exchange Student, School of Engineering, Department of Computer Science

PUBLICATIONS

- Jian He*, **Chenxi Yang***, Zhaoyuan He, Ghufran Baig, Lili Qiu. *Adaptive Scheduling for Edge-Assisted DNN Processing.* In Submission.
- **Chenxi Yang**, Yang Chen, Yuan Xuan. *Sensing Peoples Time Management Activities: A Study Using Wearable Devices.* Proc. of the 16th ACM Conference on Embedded Networked Sensor Systems (SenSys18), Poster Session, Shenzhen, China, Nov. 2018.
- **Chenxi Yang**, Yang Chen, Qingyuan Gong, Xinlei He, Yu Xiao, Yuhuan Huang, Xiaoming Fu. *Understanding the Behavioral Differences Between American and German Users: A Data-Driven Study.* Big Data Mining and Analytics, 2018, 1(4):284-296. [PDF]
- Shuang Jiang, Dong He, **Chenxi Yang**, Chenren Xu, Guojie Luo, Yang Chen, Yunlu Liu, Jiangwei Jiang. *Accelerating Mobile Applications at the Network Edge with Software-Programmable FPGAs.* Proc. of IEEE International Conference on Computer Communications (INFOCOM 2018), Honolulu, HI, USA, Apr. 2018. (Acceptance ratio: 309/1606=19.24%) [PDF]

RESEARCH EXPERIENCE

Sensing Peoples Time Management Behaviors Based on Wearable Devices
Advised by Prof. Yang Chen, Fudan University — *Jun. 2018 - Apr. 2019*

- Research Assistant at *Mobile Systems and Networking Group*.
- Implemented a novel application for time management based on wearable devices.
- Presented the first attempt to collect and analyze users patterns about using smartphones, and allowed a collective understanding of users task completion rate and how users' task engagement is influenced by smartphones and other external factors.
- Designed an one minute online survey to study potential factors, covering 93 participants. The results showed that the category of application has the greatest impact, followed by the progress of the current task and location.

Data Driven Study on User Behavior Differences in Online Social Netwrok
Advised by Prof. Yang Chen, Fudan University — *Oct. 2017 - Apr. 2018*

- Research Assistant at *Mobile Systems and Networking Group*.
- Provided a comprehensive statistical and demographic analysis of American and German users behavior based on the Yelp Open Dataset, and compared the results in a comprehensive manner.
- Demonstrated that American users are more influential on Yelp than German users, and their friends are scattered in more cities and German users have a clearer line between daytime and nightlife than American users. Our results also proved that collectivism is important for German users, whereas individualism is a priority for American users.
- Verified the feasibility of applying big data analysis in the context of cultural behavior. And Employed our analysis of users online behavior to construct a classification model that can accurately detect whether a user is from the USA or Germany. This classification model achieved an F1-score of 0.891 and AUC of 0.949.

FPGA-based Edge Computing for Accelerating Mobile Applications
Advised by Prof. Chenren Xu, Peking University — *Jul. 2017 - Aug. 2017*

- Research Assistant at *Center for Energy-efficient Computing and Applications*.
- Combining the advantages of edge offloading and FPGA-based computational acceleration, designed and built an FPGA-based edge computing model, which effectively reduce the response time and energy consumption.
- Designed a proof-of-concept FPGA-based edge computing system, and performed the experiments in a case study using three CV-based interactive applications.
- The results showcased that the FPGA-based edge computing system reduced the response time and execution time by up to 3x and 15x respectively over CPU-based edge/cloud offloading. And our system achieved up to 29.5% and 16.2% energy efficiency on mobile device and edge nodes respectively.

INTERNSHIP EXPERIENCE

Goldman Sachs Asia L.L.C, Technology Division

Summer Analyst, Hong Kong — *Jun. 2018 - Aug. 2018*

- Worked at *Goldman Sachs Electronic Trading* (GSET) Team.
- Designed and implemented automatically filling-in timesheet in the firm.
- Built a workload generation tool, which simulated the procedure of trading orders flowing through the OSI layers for testing the new generation ultra low latency DMA trading gateway.

PROFESSIONAL SERVICE

Teaching Experiences

- Software Engineering — *Fall 2019*

Reviewer of the following conferences

- ACM HT'18
- ICC'18
- GLOBECOM'17

AWARDS & HONORS

- Shanghai Outstanding Graduate — *2019*
- Meritorious Winner, Mathematical Contest in Modeling — *2018*
- Chinese National Scholarship — *2017*
- First Prize, Honor Program Scholarship of Computer Science — *2017*
- Fung Scholarship, The University of Hong Kong — *2017*
- 2^{nd} Prize of the Scholarship for Outstanding Students, Fudan University — *2016*

PROJECTS & WORKS

- Workload Generation Tool for testing the trading system
- Word Recognition based on a Digital Signal Processor
- Drowsy Driver Detection and Video Classification Tool
- Online Tutor Selection System
- Book Management System with data storage on MySQL
- Simulation of a simple CPU
- Map Navigation using various graphic algorithms

PROFESSIONAL SKILLS

- Python, C/C++, Java, Javascript
- MySQL, Git, Gnuplot, SNAP, Scapy, Qt, Android
- WEKA, XGBoost, Pytorch, Tensorflow
- LaTeX