

# Guozhen She

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## EDUCATION

**Fudan University**, Shanghai, China  
**Bachelor of Computer Science** expected in 07.2020  
GPA (overall): **3.55/4.0**; Ranking: **21/117(17.9%)** GRE:331  
**Body:**Computer Architecture(A)| Computer Network(A-)|Computer System(A)|Database Implementation(A-)|Distributed System(A)  
**Brain:** Linear Algebra(A)|Mathematical Analysis(A)|Neural Network and Deep Learning(A-)  
**Mouth:** C Programming(A)|C++ Programming(A-)|Web Development(A)|Digital Logic Design Experiments(A)

## SKILLS

**Programming Language:** Python, Java, Golang, C, C++, JavaScript, MATLAB, Rust(newbie), Verilog(newbie)  
**Framework & Library:** Tornado(Python),D3.js,Kernel Programming(C,Assembly,kgdb),Tensorflow,PyTorch, C++ STL  
**Tools:** LaTeX, Vim, Git, Docker, GNU toolchain, kvm  
**Soft Skills:** Networking,Open Source Engagement,Ask Smart Question

## ACADEMIC EXPERIENCES

**University of Illinois Urbana-Champaign** REU program | Research Intern  
• **Seccomp Acceleration for Container**  
    ■ Linux kernel support for container acceleration.  
**Tsinghua University**, Research Intern  
• **Chat App Monitoring System**  
    ■ Hacked [WeChat](#) communication protocol to intercept the message, built a daemon web service to monitor and store the intercepted messages(video, text, audio) by polling request.  
    ■ Build a mobile app to help the community members recording their activities.  
**Fudan University**, Mobile Systems And Networking Group Research Assistant April.2017-  
• **Auditing for Serverless Computing**  
    ■ **Building metric tools to evaluate the serverless computing on public cloud service.(On Going)**  
• **Social Network Analysis (Google Scholar & LinkedIn)**  
    ■ Crawled data from LinkedIn and Google Scholar.  
    ■ Used deep learning techniques to auto detect the mis-configured profile.  
• [Qingyun Go](#)  
    ■ Built a **geo-based** social App. The communication between backend and frontend is hosted on HTTPS protocol based on RESTful API. The backend is FastCGI integrated with C++ code, while the frontend is a javascript runtime with asynchronous API. Then developed some streaming analytic tools to monitor the status of service and the behavior of users.

## INDUSTRY EXPERIENCES

**Microsoft Research Asia**, System and Network Group | Research Intern Jan.2019-  
• Real-time Bot Detection System for Azure Cloud Service  
    ■ Implemented a Golang web service to **build the preprocessing pipeline** of daily network log data(8,000,000) from Bing, which parse the raw log concurrently leveraging **goroutines** into heterogeneous files hosted on a distributed file system. Implemented a tree-based mapping structure to support the range query for ip address in the internal service.  
    ■ Based on that, provided an analytic service(React, D3.js) for visualizing and understanding data. For conservation of memory footprint on VM, the data was **fetchd on demand** and cached as the data structures in memory, guaranteeing the data at **hotspot** would stay longer in memory to accelerate the analytic efficiency.  
    ■ Implemented the algorithm to generate the behavior-based images for each session, then develop a **CNN-based** model to detect bot behavior by classifying the images generated, which reached **94.3%** accuracy on labeled Bing log data.  
    ■ Submit patch to hyperscan, then built a useragent parsing library utilizing hyperscan for high performance regex matching..  
**Intel Asia-Pacific R&D**, Open Source Technology Center | SDE Intern Aug.2018-Nov.2018  
• **Contributed code** to [StarlingX](#)(OpenStack Foundation), assisted in deploying the StarlingX on bare-metal devices.  
• Built a **rule-based** command line tool which migrates code from python2 to python3.  
• Assisted the colleagues to setup the **compiling farm** based on K8S for building of StarlingX project.  
• Implemented a static graph-based algorithm for **package dependency analysis** in the project.

## PUBLICATION

**LBSLab: A User Data Collection System in Mobile Environments**  
• Qingyuan Gong, Xinlei He, Qinge Xie, Shihan Lin, **Guozhen She**, Ruiyu Fang, Rui Han, Yang Chen, Yu Xiao, Xiaoming Fu, Xin Wang  
• Proc. of Workshop MHC, **UbiComp** 2018