

# 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-)  
**Brain**: Distributed System(A)|Linear Algebra(A)|Mathematical Analysis(A)  
**Mouth**: C Programming(A)|C++ Programming(A-)|Web Development(A)|Digital Logic Design Experiments(A)  
**Metaphysics**: Neural Network and Deep Learning(A-)

## SKILLS

**Programming Language**: Python, Java, Golang, C, C++, JavaScript, MATLAB, Rust(newbie), Haskell(newbie)  
**Framework & Library**: Tornado(Python),D3.js,Kernel Programming(C,Assembly),Tensorflow,PyTorch, LLVM  
**Tools**: LaTeX, Vim(not an Emacs guy), Git, Docker, GNU toolchain, C++ STL  
**Soft Skills**: Networking,Open Source Engagement,Ask Smart Question

## SELECTED PROJECTS

**C++ Multiple Pattern Text Matching Tool** (<https://github.com/hazelnutsgz/NaiveACAutomation>)  
**Interactive Visualization of Google Scholar Coauthorship**(<https://github.com/hazelnutsgz/NaiveScholarMap>)  
**C++/C# UserAgent Parser**(<https://github.com/hazelnutsgz/UADetectorCPP>)

## ACADEMIC EXPERIENCES

**University of Illinois Urbana-Champaign** REU(Computer Science Department) Research Intern

- **System Security**
  - Working on Docker Acceleration
  - Working on Linux Security Module

**Tsinghua University**, Sociology Department 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-

- **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.
  - 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.

**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.

**Wish(ContextLogic)** | SDE Intern Jan.2018-Apr.2018

- Developed a meta information adjustment service, using Tornado framework at the backend, and backbone.js at front end.
- Built an adaptive notification service for accounts out of credits. Based on that, designed an algorithm to **spot zombie users**.
- Built a **channel search service** equipped with multiple filters to assist users to select the proper channel on their own conditions.

## 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

## MISCELLANY

**Interest**: Archeology (on Computer Science), Soccer(DM), **Road Cycling**(Individual Time Trial, Mountain Climbing)