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(JS), Node.js(V8), Kernel Programming(C), 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++ High Performance 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 <u>WeChat</u> 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 **fetched 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 migrate 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)