Shuyu Yuan

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Self Introduction:

My name is Shuyu YUAN, a graduate of University of Melbourne, Master of IT. I did my internship in Intel, building data visualization systems, and I trained my communication, understanding and expression abilities there. I am now doing internship in Melbourne eResearch Group, responsible for data harvestering and mini API developing. Additionally, I gained the experience of Java, Javascript, Vue.js, Docker, cloud platform (Melbourne Research Cloud), Python, Flask, RESTful APIs, NoSQL database(CouchDB, Firebase), distributed systems and clusters in my courses. Besides, I am familiar with Git and agile development process. Also, I am outgoing, attentive, curious and fast-learning. I like challenges and I am interested in new technologies and frameworks. Finally, I think I meet the most requirements of this role.

Education Background

Graduate: Master of Engineering (Information Technology),

July 2018 – August 2020

University of Melbourne

Undergraduate: Computer Science, Tongji University

Sep 2014 – Jun 2018

Internship Experience

Junior Python Developer, School of Computing and Information Systems University of Melbourne

Aug-Now 2020

- Coordinated in a team to build a realtime traffic data visualization system.
- Querying data from VicRoads API and sent them to Kafka broker.
- Created mini APIs under Flask framework.
- Whole system deployed on multiple VMs, and under the management of kubernetes.
- Learned a lot about agile development process, some code and project specifications, and communication skills.
- For further information, please contact Richard Sinnott: rsinnott@unimelb.edu.au and Morandini: luca.morandini@unimelb.edu.au

Assistant Engineer, Intel Corporation (China)

Mar-Jun 2018

- > Coordinated an Idea to Reality team project, which accomplishes a great display program.
- Cooperated with the team to get the data from the backend and displayed them in the frontend vividly based on the language of HTML, JavaScript, and python.
- Learned a lot about communication skills, teamwork as well as improved the ability of web project development.

Assistant Engineer, Baosight Software Co, Ltd. Shanghai

Jun-July 2017

- Responsible for the basic knowledge of the neural network.
- ➤ Built a CNN to deal with the MINST dataset in the Tensorflow, analyzing the performances of different optimizers such as gradient descent optimizer, adagrad optimizer, adam optimizer, and momentum optimizer.
- Learned some knowledge about the deep learning network, also got some experience of working as a team member.

Project Experience

Participant, A data visualizing system on the cloud platform

Mar – Jun 2020

Completed in Cluster and Cloud Computing

- ➤ Built a system for visualizing data of the Covid-19 in Australia, and made some conclusions given the Covid-19 related tweets.
- > The system includes frontend to visualize the data, the backend to gather and analyze the data, and the database to store the data.
- Container technology is used and I am responsible for this part. Different containers are

deployed on different instances to hold frontend, backend, and database.

- Also, clusters of the databases and backend to do failure tolerance and load balancing.
- > Use of ansible to automate deployment and startup of the system.

Participant, GAN-based Deepfake

Dec 2019 – Feb 2020

Completed in Research Project

- > Compared different GAN-based Deepfake model, deployed one of them on the GPC cloud and built a mobile application to swap people's faces with the model.
- Application sent HTTP request to the server, got results returned, and showed it on the application.
- Employing the docker container on GPC

Participant, A Fact Verification System

Mar – Jun 2019

Completed in Web Search and Text Analysis subject

- Built a system for justifying whether a fact was correct or wrong based on the support of downloaded wiki texts. It could be unknown due to a lack of information.
- System contains IR part and justifying part.
- All system was built in Python, also with the AllenNLP framework.

Participant, A Lost-And-Found Android Application

Aug – Nov 2019

Completed in Mobile Computing System Programming

- An Android application regarding helping people publish the things they lost or found on campus.
- Application is linked to the firebase for managing the data, including the lost items' data and chat record.
- > Key-value oriented data structure to store the chat record, and document oriented data structure to store the lost items.
- Also, a map-based application, in which you can see which item is found in a certain building.

Participant, A Peer to Peer File Synchronization System

Mar – Jun 2019

Completed in Distributed System

- > Built a file synchronization with peer to peer structure.
- All done with Java, including the multi-threading, TCP and UDP communication protocols. (FileSystem APIs were provided by the lecturer).
- Learned the skill of building a system in a team, for example, communicating with teammates and reading their comments and explanations.

Individual capstone, Human facial expression recognition based on AlexNet:

Feb – Jun 2018

- ➤ Built a CNN with the same structure of AlexNet to work on facial expression recognition.
- Dataset was got from the internet and divided them into 7 kinds of facial expressions, which are anger, disgust, fear, happy, sad, surprised, normal.
- Learned the background knowledge of TensorFlow and basic knowledge of CNN.

Team Leader, Shanghai University Students' Innovative Project:

Mar 2017 – Feb 2018

Personalized Recommendation Service System for Library Based on Data Mining

- ➤ Built library mining model to reduce resources' idle rate.
- > Created an automated dynamic recommended booklist for each reader based on their borrowing history with the methods of collaborative filtering and association rules. Stored their personal information and reading preference in a library for prediction by Python, and MATLAB.
- > Understand the role and responsibility of a team leader and got a great experience of assigning tasks to team members and making decisions.

Skills and Expertise

Software Proficient in Visual C++6.0, Visual Studio, PyCharm, Idea IntelliJ, MATLAB, Navicat, Phpstorm

Programming Proficient in Java, C++, Python, Javascirpt, Verilog, SQL, Vue,

Flask(framework)

Skills Familiar with communication and listening skills, good understanding, passionate

about contacting with innovative technology and learning new methods.