### **Zhuoting Xie**

# Year 3 Bachelor of Computer Science

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#### Technical Skills

Web: React, Redux, NestJs, NodeJs, Express (all currently acquiring)

Programming languages: Java (2yrs), C++ (1yr), Python (2yrs)

Testing: JUnit, TDD

Statistical software: R (3yrs), SAS

#### **Academic Projects**

## Coder Community (React, Redux, NestJs, MongoDB)

(May~ 2020)

- Cooperated with three other students to implement a web app for programmers where basic functionalities including multimedia post retrieval and storage as well as authentication are supported.
- Implemented backend using NestJs following RESTful principles. Post and user relevant data are stored in MongoDB.
- Implemented frontend using React and Redux.

# **Biological Image Processing** (Java, Python, R)

(Sep 2018 – May 2019)

- Worked with a group of 4 Computer Science postgraduate students to design an image processing software to analyze the resulting colour of colorimetric reaction.
- Contributed to design feature extraction and ambient light compensation algorithms. Analyzed images of the reaction result (white, blue, purple) and gave interpretations of the resulting colour.
- Exploited OpenCV package (Python & Java), learned feature extraction and image processing algorithms (e.g. perspective transformation), and adapted in the image processing workflow.
- Implemented color constancy algorithms (white patch, gray world etc.) and raised up self-designed histogram based algorithm which fit better the specific scenario and outperformed the classical methods.

# **Volunteer / Community Involvement Experience**

# Healthcare Volunteer Program in Ghana

(July 2016)

- Volunteered in a local hospital serving more than 500 people every day. Learned and performed basic tests (e.g. full blood content tests) in the lab.
- Outreached to an orphanage and provided free Hepatitis B testing and vaccination services to more than 200 children living there. Worked cooperatively with a group of 10 medical students from different countries (US, Canada, UK, and Egypt).

### **Education**

### **Bachelor of Computer Science (BCS)**

(Sep 2019 – now)

University of British Columbia, Vancouver

#### **BSc** in Biological Science at

(Sep 2015 - Jun 2019)

Xi'an Jiaotong-Liverpool University, Suzhou, China