# **Xiaoying Chang**

Address: 1735 E34th Avenue, Vancouver, BC, V5P 1A4

**Phone**: 778-316-6816

Email: xiaoyingchangca@gmail.com Website: https://xyc15.github.io/portfolio/

# **OBJECTIVE**

• Highly self-motivated personal seeking a software developer positon.

• With full stack/React web app development, and large app platform modification experience.

#### **SKILLS**

#### **Basics**

Languages Framework/Library Platform Database

- Algorithms, Data Structures, Computer Networks, Web Development, Git, GitHub, Webpack
- Java, JavaScript, Python, HTML5, CSS3, C, C++
- Bootstrap, ¡Query, React, Redux, Express.js, Node.js, Mongoose
- Firebase, AWS
- MongoDB, PostgresSQL

## **EXPERIENCE**

## 2015.09 - present

#### **Research Assistant**

Carleton University, Ottawa, ON, Canada

- Proposed and simulated a collaborative search approach to locate physical objects, which saved 56.7% energy with the best search accuracy and time.
- Formulated two greedy algorithms to achieve the maximum sensing coverage, and most accurate object position localization.

#### 2017.02 - 2017.07

### **Software Developer (Intern)**

You.i TV, Ottawa, ON, Canada

- Designed and implemented a multithread server, reduced memory usage of existing huge singleton app platform by at least 13%.
- Proposed and applied "PerClientSingleton" method, which enabled multiple clients to be served in parallel with the least modification to the original engine code.

## 2015.09 - 2016.07

### **Software Developer (Intern)**

Gnowit, Ottawa, ON, Canada

- Developed a novel web crawler to fetch contents from deep inside the domain based on use requirements at low time cost.
- Identified special characteristics of Rich Internet Application (RIA), which greatly improved existing crawler by fetching dynamically changing content.

## **PROJECTS**

### 2018.12 - 2019.01

# "BabyHaul" Full Stack Web Application (Personal Project)

- Created a web app to assist people in selecting popular baby products.
- Built the app using Express framework; applied MVC design pattern; styled with Bootstrap4; set up RESTful routing; used Passport.js for authentication; managed data with MongoDB.
- URL: <a href="https://babyhaul.herokuapp.com">https://babyhaul.herokuapp.com</a>

#### 2018.05 - 2018.06

# "Spending" React Web Application (Personal Project)

- Created a React app to keep track of users' daily spending and manage their financial budget.
- Used React-Redux library to manage state, React-Router DOM for URL navigation. Set up authentication and data management using Firebase.
- URL: https://spending-react.herokuapp.com

#### **EDUCATION**

#### 2015.09 - current

### Ph.D., Carleton University, Canada

- Major: Systems and Computer Engineering
- Research Assistant in IoT search area
- Grade: A+

#### 2012.09 - 2015.02

# Master of Engineering, Beihang University, China

- Major: Electronic and Communication Engineering
- Postgraduate National Scholarship (3%)
- GPA: 89.0/100, rank: 7/93

#### 2008.09 - 2012.06

# Bachelor of Engineering, Shijiazhuang Tiedao University, China

- Major: Electronic and Information Engineering
- Hebei Province Outstanding Graduate (5%)
- GPA: 87.4/100, rank: 3/200