# **HAOCHEN QI**

## 0481 994 399

# hqq@student.unimelb.edu.au

#### **PROFILE**

- Master of Information Technology student at the University of Melbourne with a keen interest in Software Development.
- Flexibility and ability to adapt to various situations and tasks required in front and backend development and cloud computing platform
- Experience in Machine Learning and Computer Vision
- Looking to develop and acquire significant knowledge and skills base in software development, full-stack web development, machine learning, and so on

# **EDUCATION**

## **Master of Information Technology**

23/07/2018- 20/06/2020

23/07/2018 - 20/06/2019

The University of Melbourne

- Mainstream: Computing
- Subjects Studied: Knowledge Technologies, Cluster and Cloud Computing,
  Distributed Systems, Internet Technologies, Algorithms and Complexity,
  Programming and Software Development, Database Systems & Information
  Modelling, Software Processes and Management
- Weighted Average Mark: 70.5
- Scholarships and Awards:

Engineering Exchange Scholarship

Awarded 2019

The University of North Carolina at Chapel Hill (exchange) 20/08/2019 - 13/12/2019

- Subjects studied: **Modern Web Programming**, Introduction to **Machine Learning**, Operating System, Wireless and Mobile Communication
- Academic Performance: Good Standing

#### TECHNICAL SKILLS

- Fundamental Programming Languages:
  - Python
  - Java
  - C Language
- Web Development:
  - JavaScript
  - HTML
  - CSS
  - Bulma.js

- React.js
- Databases:
  - MySQL
  - CouchDB
- Others:
  - Jupyter Notebook
  - AWS
  - Git
  - Nectar
  - Linux

#### PROJECT WORK

#### **PocketMuseum Website Development**

20/09/2020 - 12/12/2020

The University of North Carolina at Chapel Hill

- Designed and implemented a fully-featured, professional modern web application PocketMuseum using HTML, CSS, Bulma, and JavaScript
- Accessed a dynamic data source (the backend) to generate content and not solely rely on hard-coded HTML pages
- Consumed a 3rd party API the Met Collection API from the Metropolitan Museum of Art
- Provided a pleasant user experience and demonstrated good design fundamentals

#### **Outlier Detection**

20/09/2020 - 10/12/2020

The University of North Carolina at Chapel Hill

- Made comparisons for outlier detection techniques using two real-world datasets: a bank credit card dataset and a cardiotocography (Cardio) dataset
- Compared three different machine learning methods: Support Vector Machine, Isolation Forest, Mixture of Gaussians, and analyzed how they work on these two datasets
- Utilised precision-recall curves to evaluate the performance of these approaches

#### **Twitter Sentiment Analysis**

01/04/2019 - 10/06/2019

The University of Melbourne

- Built multiple VMs of a Twitter harvesting application running on the UniMelb Research Cloud together with an associated CouchDB database and a web server
- Used Ansible to provide a script, which, when executed, created and deployed the virtual machines and orchestrated the setup of all necessary software on said machines (i.e. CouchDB, the twitter harvesters, web server and client) to create a ready-to-run system
- Collected about 0.75 million tweets through the Twitter APIs and combined with AURIN data and then stored these data in CouchDB database for analysis
- Utilised CouchDB's built-in MapReduce capabilities to analyse targeted data
- Created a front-end web application for visualising these analyses and interacting with the server through a ReSTful design

#### REFEREES

Available on request