CHENGHAO MA (CHARLES)

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CARRIER OBJECTIVE

A junior programmer is seeking an internship or part-time job related to Data Processing and Front-end Development. I have rich experience in Python and have good self-motivation in learning and working.

EDUCATION

University of New South Wales, Sydney   *February 2018 - Present*
Master of Information Technology   Weighted Average Mark: 81.67
AI & Database

Chang'an University, China   *July 2013 - June 2017*
Bachelor of Engineering   Weighted Average Mark: 80.0
Resources Exploration Engineering

PROJECTS

Image segmentation
This project is focus on **computer vision** to segment some images using different methods. These methods are from simple to complex, such as **threshold control, image convolution** and **SVM**.

Recommendation system using collaborative filtering
This project mainly focuses on three parts: User-based, Item-based and Content-based Collaborative filtering. The recommendation algorithm is based on **Nearest Neighbours**, **Singular Value Decomposition**, and **Bayesian Personalized Ranking** as well.

Hyponymy classification model using LSTM
This NLP project is to predict hyponymy based on **Recurrent Neural Network**, which uses **long short-term memory** cells to solve the gradient disappearance and gradient explosion problem in long sequence training.

Address prediction using HMM
This project is to predict the categories of different address names using **Viterbi algorithm** and **Hidden Markov Model**. Some natural language pre-processing skills have been implemented in words tokenization.

TECHNICAL STRENGTHS

Programming Languages	Python, C, shell, JavaScript
Abilities	Data processing, Machine learning, Internet programming
Modules	Numpy, Open-CV, Flask, React
Software	VS Code, Markdown, PhotoShop, Premiere

TEAMWORK EXPERIENCE

Sep 2014-Jul 2015	Head of Network Department in Student Association
Sep 2015-Jul 2016	Vice President of Student Association
Jun 2017	Excellent Student Cadre

WORKING EXPERIENCE

May 2019-present	Course Tutor in Sunshine Education

COMPETITION EXPERIENCE

Jul 2019	3/56 in UNSW DataSoc Hackathon