YUAN GAO

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EDUCATION

The University of British Columbia

September 2019 - December 2021

Master of Engineering in Electrical and Computer Engineering, Faculty of Applied Science

Average GPA: 91.4/100

University College Dublin & Beijing University of Technology

September 2015 - July 2019

Bachelor of Engineering in Internet of Things Engineering, First Class Honours Degree

Average GPA: $3.91/4.20 \parallel$ Award GPA: $4.13/4.20 \parallel$ Top 1%

EXPERIENCE

Backend Software Engineer Co-op, Procurity, Vancouver

June 2020 - May 2021

- Delivered new spend management features which had processed over \$86 million orders
- Collaborated with engineering leadership as projects owner to help the team achieve effective agile and drive continuous delivery, such as Scrum/Kanban, CI/CD, test automation and infrastructure
- Delivered written and verbal technical feedback. Directly mentored engineers through code review and pair programming. Actively participated in product demos

Research Assistant, Information Theory Lab UBC, Vacnouver

May 2021 - September 2021

Polar coding for interference mitigation in 5G network. Supervisor: Professor Lele Wang

• Implemented the polar coding algorithms in Python to automatically polarize channels, encode and decode messages. Mitigated the interference in concurrent 5G transmission

PROJECTS

Distributed Key-value Store, Vancouver

July 2021 - September 2021

• Built a distributed key-value store in Go based on consistent hashing and Chord model. Achieved sequential consistency, less than 1% key losses and high performance on Google Cloud Platform

Automated Essay Scoring Model, Beijing

February 2019 - May 2019

Bachelor Degree Project - Natural Language Processing Section

• Designed and implemented a Two-stage Automated Essay Scoring model. Achieved 0.84 Quadratic Weighted Kappa score on Kaggle's dataset and reached state-of-the-art performance

Elderly Service Robot, Beijing

July 2018 - September 2018

- Led a group of 3 students developing a robot system providing functionalities to enable healthy aging
- Developed functions for robots to collect indoor condition data from a Wireless Sensor Network
- Established self-control module on Robot Operating System to maintain a suitable environment

Automatic Classification Dustbin, Beijing

February 2018 - July 2018

• Led a group of 3 students to implement a system to classify the trash into different categories based on VGG pattern recognition model and achieved 91% accuracy

TECHNICAL SKILLS

Programming: Python, Go, Java, JavaScript, C++, SQL, MATLAB, Assembly, R, VerilogHDL

Framework and Tools: Django, Kubernetes, Docker, Spring, Robot Operating System, Arduino, Google Cloud Platform, Amazon Web Services, Raspberry Pi, Keras, Intel 8051, MPI, OpenMP, Linux

ACADEMIC HONORS & AWARDS

• Master of	f Engineering	International	Graduate	Entrance	Scholarship, UBC
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2020

• Excellent Graduate Award of Beijing, top 1%, awarded by Beijing Municipal Commission of Education 2019

• National Scholarship, top 0.2%, awarded by Ministry of Education of the People's Republic of China

2018

• UP-TECH Cup National College Student Embedded System Design Competition, Top 1 Award

2018

• IEEE Xtreme 11.0 Programming Competition, ranked at 163 out of 2121 teams, awarded by IEEE

2018 2018

• China Robot Competition, the Second Award

2016, 2017, 2018

• Outstanding Academic Achievement Award of Beijing University of Technology