MENG TIAN

Committed| Analytical | Bilingual | Team Player |
Self-motivated Independent Researcher

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Personal Summary

Highly motivated Computing Researcher in Reinforcement Learning, Game Theory, Data Science, Machine Learning, Artificial Intelligence. Knowledgeable in computing theories and processing methods. Excellent problem-solver with outstanding attention to detail. Computer-literate professional capable of adapting quickly to new software and programs.

Education

Master of Science: Artificial Intelligence, 08/2021 - 06/2022

Nanyang Technological University - Singapore

- Expected Overall: 90%+.

- Core Modules: Machine Learning: Methodologies and Applications, Deep Learning and Applications, Mathematics for AI, Python Programming

- Research: A study on how to strengthen the RL neural network training process and improve its effectiveness through statistical analysis and reward shaping

Bachelor of Science: Honours in Computer Science (91.1%), 09/2017 - 05/2021

The University of British Columbia - Canada

- Core modules: Computer Programming I (89%), Integral Calculus with Applications to Physical Sciences and Engineering (82%), Machine Architecture (80%), Software Engineering (88%), Introduction to Data Analytics (88%), Analysis of Algorithms (100%), Web Programming (91%), Capstone Software Engineering Project (97%) and Introduction to Artificial Intelligence (90%)

Research Experience

Research Team Member, 08/2021 - 04/2022

Nanyang Technological University – Singapore

- Improve RL neural network model (PPO) through defects state targeting and corresponding reward shaping.

- Expected publication in 1/2022

Independent Researcher, 09/2020 – 04/2021

The University of British Columbia - Canada

- A research on constructing a new attention mechanism using QT community.

- Embedded with DGL library using QT community.

- Warped the code up into a usable module for universal graph embedding usages.

Independent Researcher, 05/2020 – 08/2020

The University of British Columbia - Canada

- A research on improving accuracy of existing crowd counting CNN architectures through input image pre-processing (based on CRSNet).

- Gain: Winning the International Undergraduate Student Research Award, UBC, 05/2020

Research Assistant, 08/2019

Institute of Automation, Chinese Academy of Sciences – China

- Assisted in coding on reproducing Star Craft 2 mining agent demo (based on a3c algorithm from Alpha Star).

- Produced the code and used the existing network model on Github to realize the operation of a3c_agent and scripted_agent on the local computer.

- Studied the A3C learning algorithm proposed by Alpha Star, in-depth its training ideas and solutions to the problem of dealing with large number of parameters.

Work Experience

TA, 08/2020 – 04/2021

The University of British Columbia – Canada

- Taught STAT 121 & STAT 124 as the TA (Paid, CAD 17/hour).

- Prepared & conducted labs.

- Held office hours for STAT 121 & STAT 124.

- Organized test and monitored quiz/exams.

Intern TA, 06/2019 – 07/2019

Global Robot Edu. – China

- Organized and assisted LEGO classes held to 5-12-year-old children.

- Collaborated with primary teachers to complete teaching tasks and helped students understand programming. For example, basic variable declarations, if, while functions, and function declarations.

Intern TA, 07/2018 – 08/2018

YNUFE IELTS Center – China

- Prepared practice quizzes/tests for classes held to IELTS candidates

- Built and maintained the two databases.

Projects

QA Leader, 2020 – 2021

COSC499 Motive.io Unity VR extension project – The University of British Columbia, Canada

- Proposed non-functional requirements and testing plan for quality control.
- Coded part of the product (Blender & Unity add-on scripts).

Developer, 2020

COSC360 Forum Website project – The University of British Columbia, Canada

- Designed the general format and visual look of the forum.
- Developed admin and user html pages.

Developer, 2020

COSC341 Android App project – The University of British Columbia, Canada

- Designed and developed an android application for home safety.
- Responsible for part reminding users to prepare first-aid stuffs for emergency situations.

Developer, 2019

COSC304 Shopping Website project – The University of British Columbia, Canada

- Developed admin html page and item database for a simulation Cat shop website.

Awards

Deputy Vice-Chancellor Scholarship for International Students, UBC, 09/2020

International Undergraduate Student Research Award, UBC, 05/2020

Deputy Vice-Chancellor Scholarship for International Students, UBC, 09/2018

Skills

Coding: Java, Python (pytorch, tensorflow), C, HTML, CSS, SQL, Javascript

Software: Matlab, R Studio, Android Studio, Unity3D

Languages: Chinese (Native), English (Fluent)

References

Available on request