# Yuanhao JIANG

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#### Intro

- Seeking for a better learning environment and inspirations, I chose to move from mainland China to Hong Kong, then to Edinburgh, UK
- Being a math and statistics student, I also have great interests in the fields of computer science and graphic design, and I self-taught game development, web development and so on. Currently I am focusing on Machine Learning, Reinforcement Learning and related areas.

#### EDUCATION

BSc

# The University of Edinburgh

Scotland, UK

BSc Hons Mathematics and Statistics

Sept 2020 - Present (graduate in 2024)

Year 1: First Class
Year 2: First Class

Year 3: Predicted First Class

# Hong Kong Baptist University

Hong Kong

Sept 2019 - May 2020

**Year 1:** cGPA: 3.72/4

Withdrew after year 1 and then came to the University of Edinburgh

## SKILLS SUMMARY

• Programming Python, Java, R, HTML, CSS, LATEX, C, Processing, MIPS assembly

Languages:

• Tools & Frameworks: VIM, PyTorch, Git, LWJGL, Bootstrap

• Platforms: Linux (Arch Based), MacOS, Windows

• Languages: English, Chinese (Mandarin)

• Other skills: JavaScript, C++, Haskell, Swift, OpenGL, GLSL, Godot engine,

(Very Basic Level) SQLite

#### RESEARCH

# $m{Mathematics~of~Reinforcement~Learning~with~Applications~to~Quantitative~Finance} \ m{Jun~2022}$ - $m{Sep~2022}$

- Construct environment for our quantitative finance scenario.
- Implementing various algorithms including Actor-Critic, REINFORCE, and PPO to solve our problem.
- Train, adjust and compare different algorithms for efficiency and effectiveness.
- GitHub repository: github.com/Yuanhao-JIANG/RL-in-QF

#### EXPERIENCE

# Careers Service, the University of Edinburgh

Part time

 $WeChat\ Assistant$ 

Sept 2021 - Sep 2022

- In charge of the management of the WeChat account and related student and alumni groups
- Searching and examining opportunities and events across UK and China and post to student and alumni groups
- Contact various employer to ensure the accuracy of the opportunities provided

## **PROJECTS**

- Light weight game engine: Tech: Java, LWJGL, OpenGL, GLSL and so on. GitHub link: github.com/Yuanhao-JIANG/Java\_game\_engine
- Translation with RNN/Transformer: Tech: Machine Learning (RNN, Transformer), Python, PyTorch. GitHub link: github.com/Yuanhao-JIANG/ml-translation
- Handwriting recognition with CNN structure (LeNet): Tech: Machine Learning (CNN), Python, Pytorch. GitHub link: github.com/Yuanhao-JIANG/ml-handwriting-recognition
- Light weight parkour game written by Processing: Tech: Processing. GitHub link: github.com/Yuanhao-JIANG/Parkour\_game