

# Yuanhao JIANG

Portfolio: [yuanhao-jiang.github.io](https://yuanhao-jiang.github.io)  
Github: [github.com/Yuanhao-JIANG](https://github.com/Yuanhao-JIANG)

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## INTRO

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- 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

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- **The University of Edinburgh** Scotland, UK  
*BSc Hons Mathematics and Statistics* *Sept 2020 - Present*  
*Year 1: First Class*  
*Year 2: First Class*
- **Hong Kong Baptist University** Hong Kong  
*BSc* *Sept 2019 - May 2020*  
*Year 1: cGPA: 3.72/4*  
*Withdrew after year 1 and then came to the University of Edinburgh*

## SKILLS SUMMARY

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- **Programming Languages:** Python, Java, R, HTML, CSS, LaTeX, C, Processing, MIPS assembly
- **Tools & Frameworks:** VIM, PyTorch, Git, LWJGL, Bootstrap, SQLite
- **Platforms:** Linux(Arch Based), MacOS, Windows
- **Languages:** English, Chinese (Mandarin)
- **Other skills:** JavaScript, C++, Swift, OpenGL, GLSL, Godot engine  
(Very Basic Level)

## RESEARCH

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- *Mathematics of Reinforcement Learning with Applications to Quantitative Finance*  
*June 2022 - Present*
  - 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](https://github.com/Yuanhao-JIANG/RL-in-QF)

## EXPERIENCE

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- **Careers Service, the University of Edinburgh** Part time  
*WeChat Assistant* *Sept 2021 - Present*
  - 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

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- **Light weight game engine:** Tech: Java, LWJGL, OpenGL, GLSL and so on.  
GitHub link: [github.com/Yuanhao-JIANG/Java\\_game\\_engine](https://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](https://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](https://github.com/Yuanhao-JIANG/ml-handwriting-recognition)
- **Light weight parkour game written by Processing:** Tech: Processing.  
GitHub link: [github.com/Yuanhao-JIANG/Parkour\\_game](https://github.com/Yuanhao-JIANG/Parkour_game)