Sun Xueli

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Education

The University of Hong Kong, BEng(CompSc)   Sept 2023 - May 2027

- Major: Computer Science | Minor: Mathematics
- GPA: 3.76 | major GPA: 3.92
- **Major Course:** Python, C/C++, Introduction to Data Structure and Algorithm, Object-oriented Programming and Java, Introduction to Operating System
- **Math Course:** Calculus and Ordinary Differential Equations, Linear Algebra, Probability and Statistics, Multivariable Calculus, Mathematical Analysis, Discrete Mathematics
- **Exchange Course:** Simulation Methods for Optimization and Learning (100/100, Peking University, 2024) Introduction to Big Data Analysis (96/100, Yonsei University, 2024)
- **Current Course:** Machine Learning, Computer Vision, Algorithm Design and Analysis, Computer Organization, Deep Learning for Computer Vision

Projects

Stochastic Simulation Project, Optimization and Learning, Peking University   July 2024

- Build Martingale Difference Model, apply the gradient descent algorithm and the SPSA algorithm to maximize a stochastic math expression, also known as Sharpe Ratio
- Use NumPy vectorization feature to optimize code implementation
- Cooperate with peer student, complete within three days, write a complete report and win the highest score
- Tools used: Jupiter Notebook, Numpy, Matplotlib
- Github repo: https://github.com/shirley430316/simulation-proj1-group18-globex2024

Experience

Research Assistant, Infobodied Lab, The University of Hong Kong   Dec 2024 - Jan 2024

- Read and replicate research papers related to human body modeling
- Utilize SMPL human body model, write Python code to enhance data processing for collected datasets
- Write prompts for datasets collection, integrate LLM in experiment code

Student Teaching Assistant, The University of Hong Kong   Sept 2024 - Dec 2024

- Conduct tutorials and provide guides on Python code writing
- Practice academic communication skills

Student Programmer, SLRLab, The University of Hong Kong   July 2024 - Aug 2024

- Work aligned with the backend group to implement a integrated platform for autism patients
- Use Springboot framework to build a portal system and an appointment system with clear interfaces, write REST API documentation
- Communicate with groupmates and frontend colleagues
- Demo code for user portal function: https://github.com/shirley430316/user-portal-backend

Other Skills and Activities

Languages: Mandarin (Native), English (Working proficiency, IELTS 7.5), Cantonese (Working proficiency)

Campus activities: General Secretary for HKU table tennis team, Chinese National Level-2 Athlete for table tennis