

CARLOS SHI

🏠 Shanghai, China | 📞 (+86) 180-0000-0000
✉️ ycshi2018@gmail.com | 🐙 github.com/CarlossShi | 💼 linkedin.com/in/yuchen-shi-0b5a711b0

SKILLS

- **Languages:** Mandarin (mother tongue) and English (IELTS score 7.5).
- **Programming:** Python (Pytorch, NetworkX, Gurobipy, PettingZoo), MATLAB, R, SQL and C++.
- **Miscellaneous:** Windows, Linux OS, Git, Bash.

EDUCATION

SEPTEMBER 2020–PRESENT

MS IN OPERATIONAL RESEARCH AND CYBERNETICS, UNIVERSITY OF CHINESE ACADEMY OF SCIENCES

- GPA: 3.82 / 4.0.
- Courses: graph theory and network algorithm (93%), principles of operational research (99%), computational methods for optimization (93%), combinatorial optimization (97%), intelligent optimization methods (95%), convex analysis (95%) and optimization and simulation methods in finance (96%).
- Research interests: reinforcement learning for combinatorial optimization problems.

SEPTEMBER 2016–JUNE 2020

BS IN MATHEMATICS AND APPLIED MATHEMATICS, SHANGHAI UNIVERSITY

- GPA: 3.87 / 4.0 (Rank: 1 of 19).
- Awards: special scholarship, national scholarship, president scholarship.
- Honors: outstanding students, outstanding student leaders, Shanghai outstanding graduates.
- Courses: mathematical analysis (99%), linear algebra (100%), advanced algebra (98%), methods of mathematical physics (100%), numerical analysis (99%) and data structures and algorithms (100%).

PROJECTS

JANUARY 2019

MATHEMATICAL CONTEST IN MODELING (TIME TO LEAVE THE LOUVRE)

- Developed a cellular automaton model to simulate the evolutionary behavior of 7,000 visitors evacuating the Louvre, identified the structure of the map that generates congestion, and devised an escape strategy for the Louvre in case of emergency.
- Team leader, responsible for writing MATLAB programs, awarded [Finalist](#), ranked [15 of 5728](#).

DECEMBER 2021–MAY 2022

MATHORCUP BIG DATA COMPETITION (SEQUENCE EVALUATION FOR INFORMATION FLOW)

- Defined an energy consumption function of user-object interaction, designed a multi-objective loss function to train the Transformer model, and predicted users' browsing behavior.
- Responsible for modelling and writing Python programs, awarded [1st prize \(bronze\)](#), ranked [8 of 2654](#).

AUGUST 2021–PRESENT

JIDI AI COMPETITION (JIDI.AI.CN)

- Designed heuristic or reinforcement learning algorithms in Python for different environments on [JIDI AI](#) platform, ranked [1 of 1221](#) overall, and participated in 4 algorithm [sharing sessions](#).
- Awarded 1st twice, 2nd thrice in seasonal RLChina competitions, 5th place in [AI Olympics Competition](#) and [IJCAI-ECAI 2022 AI Olympics Competition](#).

INTERESTS

- **Draughts.** Amateur Grade II Athlete in Shanghai.
- **Rubik's Cube.** High school club member, won 2nd place of CFOP relay in Shanghai High School Rubik's Cube League.

REFERENCES AVAILABLE UPON REQUEST.