
CHARLES ZHAOXI XIONG

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EDUCATION

Harvard University

Ph.D., Physics
Transferred from University of California, Berkeley
GPA 4.0/4.0 | White Teaching Prize

Cambridge, MA
05/2019

Massachusetts Institute of Technology

B.S., Physics and Mathematics
GPA 5.0/5.0 | Phi Beta Kappa Honor Society

Cambridge, MA
06/2014

SKILLS

Languages: Python, R, MATLAB

Tools: Bash, Git, Vim, SQL, Bazel (working knowledge), Airflow (working knowledge), Jenkins (working knowledge), Pylint (working knowledge), various templating tools

EXPERIENCE

The Voleon Group

Member of Research Staff

Berkeley, CA
07/2019 – present

- Conducted quantitative research and implemented systematic trading strategies in end-to-end machine learning pipelines
- Involved in early development, research, and launch of a new product

Harvard University (Transferred from University of California, Berkeley)

Research Fellow | Graduate Student Researcher

Cambridge, MA | Berkeley, CA
09/2014 – 05/2019

- Trained neural networks and boosting models to reconstruct quantum states of atomic systems from experimentally measurable autocorrelation functions
- Built optimization models for racing strategies in time trials of Tour de France cycling competition
- Applied algebraic topology techniques to exhaustive classification of physical phases of matter at low temperatures

Massachusetts Institute of Technology

Undergraduate Researcher

Cambridge, MA
08/2011 – 06/2014

- Searched for anomalous magnetic materials by numerically solving high-dimensional optimization problems
- Studied new types of data encryption schemes that leveraged principles of quantum mechanics

International Physics Olympiad

Gold Medalist

Merida, Mexico
07/2009

- Represented China (5-member delegation) and won gold medal at the 2009 International Physics Olympiad

Asian Physics Olympiad

Gold Medalist

Bangkok, Thailand
04/2009

- Represented China (8-member delegation) and won gold medal at the 2009 Asian Physics Olympiad
- Won special award for highest score in theoretical exam

RESEARCH

- 10 publications/preprints in quantum information theory, mathematical physics, and condensed matter physics
- 180+ citations as of Nov 2021, including a single-author paper that was cited 40+ times
- Presented at seminars at Yale, MIT, Harvard, and University of Calgary
- List of publications available at [Google Scholar](#)