Victor Qin

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Education

MIT Cambridge, MA Expected Graduation: **May 2026**
AeroAstro PhD, MS (2023) Advisor: Prof. Hamsa Balakrishnan
Coursework: Multiagent Learning, Optimal Controls, Underactuated Robotics, Planning and AI, Linear Optimization, Communication and AI, Game Theory
Honors: NSF Graduate Research Fellowship, Mathworks Fellowship, NCCR Automation Fellow (ETH Zurich)

Harvard University Cambridge, MA Graduation: **May 2021**
Electrical Engineering SB, Government Minor GPA: 3.87
Coursework: Systems and Controls; Signals and Communications; Kinematics; Digital and Analog Circuitry
Honors: Thesis Honorable Mention; Highest Honors in Electrical Engineering; Cum Laude

Selected Publications

"Modeling Competition Between Service Providers in Advanced Air Mobility" – *ICRAT 2024* (best paper)
"Market Structures for Service Providers in Advanced Air Mobility" – *ATM Seminar 2023* (first author)
"Satellite Collision Avoidance Using Repeated Games" – *AIAA Astrodynamics Specialist 2023*
"Traffic Management Protocols for Advanced Air Mobility" – *Frontiers in Aerospace* (first author)

Experience

DINaMo LAB Graduate Research Assistant Sept 2021 – Present
- Published and presented novel interdisciplinary methods from autonomy, game theory, and optimization
- Mentored undergraduate researchers on reinforcement learning methods

CURATED INNOVATION Research Team Member Sept 2023 – Present
- Lead writer working with startups on patent proposals on rocket engines, air vehicles, and virtual reality
- Helped filed twelve patents (including one named); interviewing engineers and reviewing law drafts

STARFISH SPACE GNC Intern June 2023 - Aug 2023
- Automated activity generation and scheduling for an on-orbit electric propulsion satellite
- Built digital twin simulation for satellite rescheduling and abort exit scenarios

THE ENGINE Platform Intern Oct 2021 – July 2022
- Assisted seed-stage portfolio companies on executive hiring, M&A, and university patent licensing
- Curated fund relationships with strategic partners and investors across the capital stack

Activities and Leadership

SPACE INDUSTRY CLUB President Sep 2022 – May 2024
- Organizer for New Space Age Conference, a part of MIT Space Week (>250 attendees, $45K budget)
- Planned earth observation and space traffic management panel

CaliPER SATELLITE Thesis Advisor Aug 2022 – May 2023
- Advisor for Harvard senior thesis team designing GNC system for interplanetary cubesats
- Presented to JPL Europa Clipper mission; mentees received Dean's Award for outstanding senior thesis

MIT Grim Beavers Assistant Coach Sep 2023 – Present
- Assistant coach for MIT Men's Ultimate Frisbee club team
- Leading and planning practices, giving individual player feedback, planning team strategy

Skills and Interests

Programming: Python, JAX, C++, Robotic Operating System (ROS), MATLAB
Language: English (native), Chinese (moderate)
Interests: Ultimate Frisbee, Science Fiction