# Tsz-Chiu Au



#### About me

I am a computer scientist who is eager to devise algorithms and design AI and robotic systems with interesting properties that enable novel applications.

### Research Interests

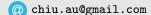
multiagent systems multirobot systems automated planning motion planning autonomous vehicles autonomous drones transportation systems robot security systems logistics systems etc.

#### Hobby

science and math web development watching movies hiking

#### **Teaching Experience**

artificial intelligence machine learning deep learning autonomous robots data structures C++ programming web technology







## Short Resumé

2012-2023

#### Assistant Professor / Associate Professor

COMPUTER SCIENCE AND ENGINEERING · UNIST 🏛

Founded the Agents and Robotic Transportation Lab, which focuses on artificial intelligence, robotics, and transportation research.

2008-2012

#### Postdoctoral Fellow

COMPUTER SCIENCE · The University of Texas at Austin 🚊

Took part in research projects on autonomous traffic management for autonomous vehicles.



#### DEGREES

2008 Ph.D., Computer Science

University of Maryland College Park 🏦

2002 M.S., Computer Science

University of Maryland College Park 🏦

1997 **B.Eng.**, Computer Science

Hong Kong University of Science and Technology in



#### Programming

C++23 **Python Shell Scripts** Java LATEX

#### RESEARCH GRANTS

2022-2027

2016-2021

**Optimal Design of High-Density Parking Lots for Autonomous** and Semi-Autonomous Vehicles

PI · National Research Foundation, South Korea

Javascript

Software Development for Disaster Analysis using Machine Learning

Co-PI · Ultra-High Performance Computing Research Center 🗹



## Professional Services

2022-now 2022-2024 2019-2023 Associate Editor, RA-L Associate Editor, ICRA Co-chair of IEEE RAS TC on Algorithms for

Planning and Control of Robot Motion

# Spoken Languages

**English** Cantonese Mandarin Korean



# RECENT PUBLICATIONS

2022 Extended Goal Recognition Design with First-Order Computation Tree Logic, AAAI.

2022 Dynamic Robot Chain Networks for Swarm Foraging, ICRA.

#### **TALKS**

2022

"Smart Lifestyle in Smart Cities: How will AI change our daily life in the future?", World Science Culture Forum, Daejeon.