Rui-Xi (Ray) Wang

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RESEARCH INTERESTS

AI for Science, AI for Health

EDUCATION

Massachusetts Institute of Technology, Cambridge, MA

09/2022 - 05/2025 (expected)

Bachelor of Science in Computer Science and Engineering and Mathematics

Cumulative GPA: 5.0/5.0

National Taiwan University, Taipei, Taiwan

Bachelor of Engineering in Electrical Engineering (incomplete)

09/2021 — 06/2022 Cumulative GPA: 4.06/4.3

RESEARCH EXPERIENCE

Connor Coley's Lab, MIT Advisor: prof. Connor Coley

Cambridge, MA

05/2024 — Present

• Developing GNN and Transformer-based Mass Spectrum Prediction model with Retrieval Augmented Generation (RAG) and graph matching algorithm

Camera Culture Group, MIT Media Lab

Cambridge, MA

Advisor: prof. Ramesh Raskar

11/2024 — Present

• Developing Decentralized AI system for healthcare with methylation data

Learning Matter Lab, MIT

Cambridge, MA

Advisor: prof. Rafael Gómez-Bombarelli

01/2023 - 05/2024

• Organizing and Bench-marking the performance of various models on NIR and UV-VIS spectrum datasets

PUBLICATIONS

(* Equal Contribution)

Journal paper

Greenman, K. P.; Wang, R.-X.; Nam, J.; Subramanian, A.; Ruža, J.; Joung, J. F.; Han, M.; Green, W. H.; Park, S.;
 Gómez-Bombarelli, R. Benchmarking predictions of near-infrared absorption with physics-based and machine learning methods in MIT graduate thesis

Conference Paper

• Wang, R.*; Wang, R.-X.*; Manjrekar, M.; Coley, C. Neural Graph Matching Improves Retrieval Augmented Generation in Molecular Machine Learning submitted to International Conference on Machine Learning (ICML) (under review)

AWARDS

Gold Medal

Osaka, Japan (remote)

08/2021

International Chemistry Olympiad

Fu Bell Scholarship(top freshman student)

Taipei, Taiwan 09/2021

National Taiwan University

WORK EXPERIENCES

Microsoft

Redmond, WA

 $Software\ Engineering\ Intern$

06/2025 - 08/2025 (expected)

Delta Biosciences

Vilnius, Lithuania

Research Intern

06/2023 - 08/2023

\mathbf{SKILLS}

- Programming Languages: Python, C++, C, Go, SQL, RISC-V
 Libraries: Numpy, Pandas, Matplotlib, PyTorch, Tensorflow, scikit-learn
- Tools: Linux, Git