Rui-Xi Wang

Student

I'm interested in the application of Machine Learning model to NLP, biochemistry, and finance

rxwangtw@mit.edu | 6172014561 | Cambridge, MA, USA

EDUCATION

Computer Science and Engineering/Mathematics
Massachusetts Institute of Technology

09/2022 - Present *GPA:5.0/5.0*

Courses

- 5.60 Thermodynamics and Kinetics
- 6.s898 Deep Learning(G)
- 6.1910 Computation Structure
- 6.3900 Machine Learning
- 6.7800 Inference and Inforation(G)
- 6.1220 Design and Analysis of Algorithm
- 6.1020 Software Construction
- 6.8611 Natural Language Processing
- 18.100B Real Analysis
- 18.650 statistics

Department of Electrical Engineering
National Taiwan University

09/2021 - 06/2022 *GPA:4.06/4.3*

Courses

- Linear Algebra
- Calculus
- Computer Programming
- Probability and Statistic
- Discrete Mathematics
- SCLD
- Organic Chemistry
- Electronic Circuit

HONOR AWARDS

International Chemistry Olympiad Gold Medalist (08/2021)
International Chemistry Olympiad (IChO)

LANGUAGES

English
Professional Working Proficiency

French
Elementary Proficiency

Chinese
Native or Bilingual Proficiency

SKILLS

Pytorch | Medical Engineering | chemprop | rdkit | C++ | C | Organic Synthesis | Python | Computational Chemistry | Machine Learning | TypeScript | TensorFlow

WORK EXPERIENCE

Undergraduate Researcher
Rafael Gomez-Bombarelli's Lab, MIT

02/2023 - Present *Cambridge, MA*

Achievements/Tasks

- I created a GitHub repository that summarizes all existing databases of experimental optical properties and computational excited state properties and then make the data uniform and usable for ML. I also compared the difference between different dataset and finetuned DL models based on the dataset collected and include evidential uncertainty with Chemprop and other cheminformatics models. Expected Second-Author Paper Submission by July 2024.

Contact : Kevin Greenman - kpg@mit.edu

Lab Assistant
MIT EECS

02/2024 - 05/2024 *Cambridge, MA*

MIT EECS

Achievements/Tasks

- Staff Office hours and lab sessions each week(10hrs) for 6.190(Intro to C and Assembly). Guide students through one-on-one debugging. Provide feedback to instructors on assignments.

Undergraduate Researcher
Coley's Group, MIT

05/2024 - Present *Taipei, Taiwan*

Achievements/Tasks

- Developing Deep Neural Networks and combinatorial optimization models for Mass Spectroscopy Prediction

Contact : RunZhong Wang - runzhong@mit.edu

MISTI Research Intern
Delta Biosciences

06/2023 - 08/2023 *Vilnius, Lithuania*

Delta Bioscience is a start-up company dedicated to early-stage drug discovery

Achievements/Tasks

- I have trained various machine learning models for predicting molecular properties, such as solubility and drug-likeness. Additionally, I learned how to analyze DNA Encoded Library data and employ pharmacophore modeling techniques to predict potential bonding site conformations for COVID-19 proteins.

Contact : Donatas Zmuidinavicius - donatas@deltabiosciences.com