

Kristin Ding

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Website: <https://hinagi.moe> **E-mail Address:** haozhd2@uw.edu**Summary**

International student at the University of Washington. Interested in precision medicine and drug development. Has collaborated on several research projects in computational biology. Previously volunteered with disabilities to access technology. Have experience applying machine learning algorithms in biological field. Have interests and background knowledge in genomics. Have strong leadership skills. Looking for experiences and interns in computational biochemistry.

Education

- **Sep. 2020 – Present** **University of Washington** **Seattle, WA**
- Pre-major Sophomore
 - Anticipated graduation in 2026
 - Intended undergraduate major (double major):
 - Biochemistry
 - Applied and Computational Math Science (Data Science and Statistics)
 - Awarded Mary Gates Undergraduate Research Scholarship

Research Experiences

- **Aug. 2022 – Present** **Senior System Engineer at DAIS Group** **Bothell, WA (remote)**
- Full-stack development and system support in DeepTracer
 - Provide technical support to bring macromolecular complex prediction tool into production
 - Develop new cryo-EM analysis tools using deep learning algorithms
 - Maintain current tools and optimize the performances
 - Optimize user experience based on feedback
 - Serve as a leader role for new student onboarding and workflow management
(<https://deept racer.uw.edu>)
- **Oct. 2021 – Aug. 2022** **Frontend Developer at DAIS Group** **Bothell, WA (remote)**
- Frontend developer of the project DeepTracer, made for de novo cryo-EM macromolecular complex structure prediction
 - Addressed on optimization of the user interface and experience
 - Helped to assist with new tool deployment on the website

- **Jan. 2019 – Feb. 2019 Participant in a Precision Medicine Research Beijing, China (hybrid)**
 - Participated in a Genomics Big Data research project held at Beijing Genomics Institute
 - Role in conducting code implementation, document compilation, and data collection
 - Obtained Patent AU 2019100355: *A Targeted Sequencing Data Analysis Method for Risk Assessment of Atorvastatin-induced* under IP Australia

Extracurricular Activities

- **May. 2018 – Aug. 2022 Co-chairman of GEL**

Cofounded GEL, a local student organization with friends; successfully held business simulation contest in Qingdao; regulated network and technical support for the organization's activities.
- **Feb. 2017 – Feb. 2020 Volunteer at Weifang Railway Station**

Assisted aged and disabled travelers using the automatic ticket purchase service; helped connecting passengers with trip plans; helped foreign passengers with translation; investigated obstacles in user experiences and informed suggestions to improve railway system service.
- **Jan. 2017 – Dec. 2018 Member of Olympiad in Informatics Training Team**

Studied data structures and algorithms in C++; trained professionally for National Olympiad in Informatics; incorporated with training sessions for new members.

Honors and Awards

- Dec. 2023 **Mary Gates Research Scholar**
- Dec. 2023 Multiple **Dean's list**, also in Aug. 2023 and Dec. 2021
- Dec. 2018 **2nd Award** in National Olympiad in Informatics, Shandong District
- Aug. 2018 **National 1st Prize** in the 13th "NXP" Cup National Intelligent Car Race, Senior High School Group
- Dec. 2017 **1st Award** in National Olympiad in Informatics, Popularization Group of Shandong District

Skills

- Computing Languages: Python, C++
- Data Science: NumPy, SciPy, Matplotlib, TensorFlow, PyTorch
- Computational Structural Biology: Chimera, PyMOL
- Computational Structural Biology Databases: EMDB, wwPDB
- Human Language: English, Chinese Mandarin