Tingxuan Huang

thuang27@cs.washington.edu

GitHub Page

+1-650-281-8078

Education

University of Washington — Seattle, WA

- *B.S. in Computer Science, Minor in Mathematics* — *Sep. 2023 – June 2026 (Expected)*
  GPA: 3.88 — *2024 Annual Dean's list*

Research Experience

Ubicomp Lab, Paul G. Allen School, University of Washington — Seattle, WA

- *Undergrad Researcher Advised by Prof. Shwetak Patel and Phd. Zhihan Zhang* — *July. 2024 - Present*
  Ubiquitous Computing, Human-Computer Interaction, Environmental Friendly Sensors
  - **Biodegradable Chipless Environmental Sensors**
    Designed a multimodel environmental friendly visual sensor that can detect the change in humanity, pH, stretch, and toxic gases using CNCs.
    Designed an android app with an ML backbone that can segment and read the sensor

Paul G. Allen School, University of Washington — Seattle, WA

- *Undergrad Researcher Advised by Prof. Sheng Wang and Phd. Zixuan Liu* — *Apr. 2024 - Dec. 2024*
  Computational Biology, Spatial Transcriptomics, Foundational Deep learning model in Biomedical application
  - **Pathology Foundational Model for Spatial Transcriptomics**
    Apply pathology deep learning foundational model on spatial transcriptomics data for various downstream tasks such as cell type classification
  - **Generation of Optical coherence tomography scan from Fundus Fluorescein Angiography**
    Built a data preprocessing pipeline for Fundus Fluorescein Angiography
    Trained simply generative models for the task

The National Center for Nano-Science and Technology — Beijing, China

- *Research Intern advised by Prof. Tang Zhiyong* — *July 2023 - Sep. 2023*
  Chiral Semiconductor

Soft Material Laboratory at Southwest University — Chongqing, China

- *High School Researcher Advised by Prof. Gan Lin and Prof. Huang Jin* — *June 2019 – June 2022*
  Cellulose Nano-Crystals, Negative Poisson's Ratio Material
  - **Synthesis of assembly-induced emission of vertical assembled CNCs**
  - **Negative Poisson's Ratio Material through 3D printing**
    Involved in the modeling and design of the 3D printed structure
  - **Applicant of auxetic materials in noise reduction**
    Designed a noise reduction pad using 3D printing. Obtained a Chinese patents as first inventor

Skills

- **Programming Languages**
  Python, Java, C/C++, JavaScript, Shell, HTML, CSS
- **Other Tools**
  PyTorch, TensorFlow, Git, Linux, UNIX, React, Android Studio
- **Relevant Coursework**
  Machine Learning, Deep Learning, Natural Language Processing, Computer vision
  Data Structure, Probability and Statistics

Awards and Honors

- **2024 Annual Dean's list of University of Washington**
- **Gold in 54th annual Chemistry Olympiad, 2022 (UK Round 1)**
- **Grand Prize in 2020 Nanotechnology Innovation and Entrepreneurship Competition in Western China**