

Teng-Jui Lin

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Education

University of Washington | Seattle, WA, USA

Sep 2019 – Present

- B.S. in Chemical Engineering, Nanoscience and Molecular Engineering Option, with Departmental Honors
- Minor in Applied Mathematics and Chemistry
- Expected Graduation: June 2023
- GPA: 3.97/4.0

Brown University | Providence, RI, USA

Jun 2018 – Aug 2018

- Pre-Baccalaureate Program

Kinglee High School | Zhengzhou, Henan, China

Sep 2013 – Jun 2019

Professional Experience

Undergraduate Research Assistant

Nov 2020 – Present

Department of Chemical Engineering, University of Washington, PI: Elizabeth Nance

- Quantified microglia morphology of 3 datasets using image processing and machine learning methods
- Developed Python API for data analysis for modular integration to fluorescent image analysis workflow
- Scanned 102 murine breast cancer tissue slices using confocal microscope (24.5 hr) for collaborators
- Surveyed literature regarding cell segmentation, morphological analysis, and image-based profiling

Summer Undergraduate Research Scholar

Jun 2022 - Aug 2022

STROBE NSF Science and Technology Center on Real-Time Functional Imaging

Department of Physics, Florida International University, PI: Jin He

- Fabricated and functionalized gold nanorods for promoting maturation of engineered cardiac tissues
- Characterized gold nanorods using UV-visible spectroscopy and Raman spectroscopy
- Measured contractile force of cardiac tissues by analyzing brightfield microscopy video data with Python
- Processed confocal microscopy images of T-tubular systems of cardiomyocytes with Python

Honors & Awards

Dan Evans Term Scholarships | Department of Chemical Engineering, University of Washington

2021 & 2022

Annual Dean's Lists | University of Washington

2020-2022

C-HACK 2022 Team 1st Place | Department of Chemical Engineering, University of Washington

2022

Mary Gates Research Scholarship | Mary Gates Endowment for Students, University of Washington

2021

C-HACK 2021 Team 3rd Place | Department of Chemical Engineering, University of Washington

2021

Discovery Fair 1st Place | Kinglee High School

2019

Peer Tutor Award | Kinglee High School

2019

Science Fair Award 2nd Place | Kinglee High School

2018

Peer Tutor Award | Kinglee High School

2018

Merit Student of Zhengzhou City | Zhengzhou Municipal Education Bureau

2018

Science Fair Award 1st Place | Kinglee High School

2017

Presentations

Presenting Author^a

3. (Poster) **T.-J. Lin^a**, A. Rubfiaro, G. Ghimire, J. He. Fabrication and characterization of functionalized gold nanorods for improving engineered cardiac tissue maturation. *Center for Diversity and Student Success Summer Research Symposium, Florida International University, Miami, FL, USA*. 29 July 2022.

2. (Oral) **T.-J. Lin[^]**, H. Helmbrecht, E. Nance. Incorporating Visually Aided Morpho-Phenotyping Image Recognition into Robust Microglial Shape Analysis. *Undergraduate Research Symposium, University of Washington, Seattle, WA, USA*. 20 May 2022.
1. (Oral) **T.-J. Lin[^]**, H. Helmbrecht, E. Nance. Robust Microglial Shape Analysis using Visually Aided Morpho-Phenotyping Image Recognition. *AIChE Pacific Northwest Student Regional Conference, Seattle, WA, USA*. 23 Apr 2022.

Teaching Experience

Calculus Teaching Assistant

Sep 2018 – May 2019

Kinglee High School

- Gave AP Calculus AB lectures 4 hours weekly to 5 students in alignment with CollegeBoard curriculum
- Clarified complex concepts and common confusions about calculus with classroom activities
- Worked with supervisor to design and grade concept checks, homework, and quizzes with tight deadlines

Service

Webmaster

Apr 2022 – Present

American Institute of Chemical Engineers (AIChE), University of Washington

- Managed and designed official website; monitored and updated social media accounts and email list
- Coordinated with internal and external media efforts to ensure up-to-date online presence
- Facilitated coordination of ChemE BBQ event and graduation ceremony

Secretary

May 2021 – Present

Women in Chemical Engineering, University of Washington

- Kept transparent meeting records, managed member email list, and maintained student group registration
- Composed biweekly newsletters to 400+ members to update events, resources, and diversity highlights
- Facilitated coordination of Veteran's Day event, Wiki-edit-a-thon, and International Women's Day event

Research and Development Officer

Apr 2020 – Jun 2021

Chinese Students and Scholars Association, University of Washington

- Designed, crafted, and edited posters and videos for major events, such as Student Orientation Programs
- Assisted in maintenance of official blog and website to provide resources based on students' need

Maple Hall Council SEED Representative

Oct 2019 – Mar 2020

Housing and Food Services, University of Washington

- Led committee meetings and planned campus-wide competition that raised waste sorting awareness
- Attended weekly hall council and SEED meetings to liaise feedback and updates on activities and initiatives

Peer Tutor of Math, Science, and English

Sep 2016 – Jun 2019

Kinglee High School

- Taught active reading and note-taking strategies to English as a second language (ESL) students
- Reviewed course notes, clarified complex concepts, and provided feedback for course assignments
- Received 2 Peer Tutor Awards in recognition of outstanding contribution to the peer tutoring program

Student Council Historian and Secretary

Oct 2017 – Jun 2019

Kinglee High School

- Prepared, coordinated, and executed activities, including Halloween activities, Thanksgiving Bonfire Nights, Christmas celebrations, Spirit Weeks, and Academic Integrity Seminar
- Drafted, edited, and updated activity proposals and meeting minutes for iterative improvement of execution
- Raised 1000+ CNY funds and 200+ books for children in need with fundraising events

Lab Peer Supervisor

Mar 2017 – Mar 2019

Kinglee High School

- Supervised biology, chemistry, and physics lab practices of 9th-grade students for Zhongzhao Examination
- Taught lab safety guidelines, standard lab procedures, and best practices, as well as ensured lab safety