

# CURRICULUM VITÆ

**Justin Chen**

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Department of Biomedical Engineering  
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Note: This is a public version of my CV. If you would like to request a full copy, please email me.

## Education

- Ph.D. in Biomedical Engineering, Northwestern University *exp. 2028*
- Advisor: Hao F. Zhang
  - Concentration in Imaging and Biophotonics
- M.S. in Bioengineering, University of California, Los Angeles *June 2023*
- Advisor: Prof. Tzung Hsiai
  - Concentration in Biomedical Devices and Instrumentation (BDI)
- B.S. in Bioengineering, University of California, Los Angeles *June 2022*
- Graduated with honors (*Cum Laude*)

## Service and Outreach

1. Panelist, BMES Graduate School Infosession (Invited) *2023*
2. Secretary and Liaison, Bioengineering Graduate Association *2022 - 2023*
3. Symposium Organizer, Caltech/UCLA NIH T32 Bioengineering *2022 - 2023*
4. Project Manager, UCLA Biomedical Engineering Society *2020 - 2022*
5. Volunteer, Reaching and Inspiring Students in Engineering *2020 - 2021*

## Teaching

As a Graduate Teaching Assistant (TA) at UCLA:

1. Bioengineering 177A (Capstone Design I) *Fall 2022*
2. Bioengineering 177B (Capstone Design II) *Winter 2023*
3. Bioengineering 180L (Integration of Biology, Engineering, and Medicine) *Spring 2023*

As an Undergraduate Learning Assistant (LA) at UCLA:

1. Physics 1C (Electromagnetism and Optics) *Spring 2022, Spring 2021*
2. Physics 4AL (Mechanics Lab) *Winter 2021*
3. Math 32A (Calculus of Several Variables) *Fall 2021*

## Awards, Honors, and Fellowships

1. Samueli Engineering Achievement Award in Student Welfare *2023*
2. Outstanding M.S. Student Commencement Award *2023*
3. Bioengineering Graduate Association Fellowship *2022*
4. Dean's List *2018 - 2022*

## Industry Experience

1. **Systems Engineering Intern** - Philips

June 2021 - September 2021

## Select Publications

1. **J. Chen**, B. Arianpour, K. Wang, J. Yin, Y. Zhang, S. Wang, E. Zhu, T.K. Hsiai, “Emerging Nanomaterials to Enhance Electrochemical Impedance Spectroscopy for Biomedical Applications,” DOI: 10.3389/fmats.2023.1146045 (2023), *Frontiers in Materials* [Invited Review].
2. K.I. Baek, S. Chang, C. Chang, M. Roustaei, Y. Ding, Y. Wang, **J. Chen**, R. O’Donnell, H. Chen, J.W. Ashby, X. Xu, J.J. Mack, S. Cavallero, M. Roper, T.K. Hsiai, “Vascular Injury in the Zebrafish Tail Modulates Blood Flow and Peak Wall Shear Stress to Restore Embryonic Circular Network,” DOI: 10.3389/fcvm.2022.841101 (2022), *Frontiers in Cardiovascular Medicine*.
3. S. Satta, A. Lai, S. Cavallero, C. Williamson, **J. Chen**, A.M. Blazquez-Medela, M. Roustaei, B.J. Dillon, N. Ashammakhi, D. Di Carlo, Z. Li, R. Sun, T.K. Hsiai, “Rapid Detection and Inhibition of SARS-CoV-2-Spike Mutation-Mediated Microthrombosis,” DOI: 10.1002/advs.202103266 (2021), *Advanced Science*.

## Conferences Papers and Presentations

1. S. Panchavati, S.V. Dussen, H. Semwal, A. Ali, **J. Chen**, H. Li, C. Arnold, W. Speier, “Pretrained Transformers for Seizure Detection,” *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, DOI: 10.1109/ICASSP49357.2023.10095660 Rhodes Island, Greece (2023). [Top 5 Paper]
2. **J. Chen**, Q. Cui, K. Wang, T.K. Hsiai, “Incorporation of Quantum Dots to Enhance Electrochemical Impedance Spectroscopy for Plaque Detection,” *2022 BMES Annual Meeting*, San Antonio, TX (2022).
3. **J. Chen**, A. Lai, T.K. Hsiai, “Computational Analysis of the SARS-CoV-2 Trafficking Pathway and COVID-19 Associated Coagulopathy,” *UCLA Undergraduate Research & Creativity Showcase*, Los Angeles, CA (2021).