Yiran (Isabella) Yang

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EDUCATION

J.D., Stanford Law School 08.2023 – 06.2026 | Stanford, CA
Activities: Stanford Technology Law Review, 1L Editor; Stanford Housing Pro Bono Project, Volunteer; Women of Stanford Law, 1L Representative and Board committee member; Member of Stanford Law and Technology Association, Stanford Asian and Pacific Islander Law Students Association, Women of Color Collective, OutLaw

Ph.D. in Medical Engineering, California Institute of Technology 09.2017 – 02.2023 | Pasadena, CA
M.S. degree awarded 2018
Awards: Forbes 30 Under 30 in Science, Class of 2021 ; Rising Stars in Chemical Engineering ; Baxter Young Investigator Award, First Tier Winner ; Edison STEM Scholarship of Chinese-American Engineers and Scientists Association of Southern California (CESASC)
Thesis: "Laser-Engraved Wearable Sweat Sensor for Metabolic Monitoring"; 20 peer-reviewed journal publications, Google Scholar citations : 3941, h-index: 15 (as of 11/24/2023)
Activities: Mentored URM undergraduate and graduate students in research; organized and hosted MedTech seminars at Caltech; volunteered as an invited speaker at the Diversity and Science Lecture Series, VSA summer camp, and American High School; hosted science outreach seminars for CESASC; organized and hosted interdisciplinary STEM seminars of Martlets Society

B.S. in Bioengineering, Rice University 08.2013 – 05.2017 | Houston, TX
Honors: *magna cum laude*, Member of Tau Beta Pi Engineering Honor Society
Activities: Rice University Society of Women Engineers, Webmaster; Rice University Student Association, New Student Representative; Campus Tour Guide; Student Ambassador

PROFESSIONAL EXPERIENCE

1L Summer Associate & Diversity Fellow, Fish & Richardson 06.2024 – 08.2024 | Redwood City, CA

Independent Journal Reviewer 2019 – present
Reviewed research manuscripts for international journals including: *Biosensors and Bioelectronics*, *Talanta*, *ACS Applied Materials & Interfaces*, *IEEE Sensors*, *Analytica Chimica Acta*, *iScience*, *Drug Delivery*, and *Digestive Diseases and Sciences*

Researcher, Inventor, Lab Manager, Caltech Gao Lab 09.2017 – 07.2023 | Pasadena, CA
- Developed wearable and portable sensors, microfluidics, devices and systems for health diagnostics and monitoring using nanomaterials, cleanroom fabrication, laser processing, inkjet printing, and 3D printing
- Designed and conducted patient trials for wearable human metabolic monitoring, in collaboration with clinicians from UCLA and City of Hope; prepared Institutional Review Board Protocols for multiple human studies
- Prepared and reviewed research manuscripts, response letters to reviewers, lab funding proposals, patent applications

Undergraduate Student Researcher, Rice University 2014 – 2017 | Houston, TX
- Developed a microscope system for blood cell diagnostics
- Researched on post-harvest produce preservation
- Researched on CRISPR-based breast cancer gene editing

PENDING PATENTS

Wearable Biosensor 2021
Inventor of a patent application directed to biosensors (unpublished)

Laser-enabled Lab on Skin 2020
Inventor of US-2020359942-A1

PUBLICATIONS & PRESENTATIONS

Celebrating AANHPI Heritage Month— Inventors Fighting COVID-19 2021
Invited Panel Discussion from United States Patent and Trademark Office

A laser-engraved wearable sensor for sensitive detection of uric acid and tyrosine in sweat, 2020
Nature biotechnology 38 (2), 217-224
- Authors: Yiran Yang et al.
- Highlighted as Editor's Choice by Science Translational Medicine
- Highlighted in Caltech News, Physics World, Xinhua, Science Daily, and more

Wearable and flexible electronics for continuous molecular monitoring, Chemical Society Reviews 48 (6), 1465-1491 2019
- Authors: Yiran Yang and Wei Gao
- Featured on Journal Front Cover
- Highly Cited Paper in Web of Science

Flexible lab-on-skin for sensitive and non-invasive monitoring of circulating metabolites and nutrients 2021
Material Research Society Spring Meeting

Highly sensitive laser-engraved graphene sensors for non-invasive monitoring of circulating metabolites and nutrients 2020
- Biomedical Engineering Society Annual Meeting
- ACS Fall 2020 National Meeting & Exposition

Design of a low cost, high-performance, achromatic, two wavelength White Blood Cell imaging system 2017
Bio-Optics: Design and Application 2017, Optical Society of America

A comprehensive list of publications on Google Scholar

LANGUAGES

Mandarin *(Native)* | **Cantonese** *(Proficient)* | **Japanese** *(Intermediate)*

SKILLS & EXPERTISE

Microfluidics | Wearable and portable sensors | Microfabrication | Laser engraving | 3D printing

INTERESTS

Ceramics | Photography | Frisbee | Bowling | Karaoke | Cat Fanciers Association

WORK AUTHORIZATION

Fully authorized to work in US as a permanent resident