

TAEHEE LEE

Biomedical engineer with hands-on experience in medical device design and development + academic translational research. Seeking innovative projects that require a strong advocate for users.



RELATED EXPERIENCE

Present
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2022

Emulate, Inc.

Product Development Engineer II

📍 Boston, MA

- Rapid product development in startup environment in collaboration with product management, biologists, and multiple disciplines of engineers
- Project lead for design and development of next generation of microfluidic Organ-on-Chip device
- Identify and translate user needs into design requirements and specifications

2022
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2021

Meinig School of Biomedical Engineering, Cornell University

Product Development - MEng Student Project

📍 Ithaca, NY

Liquid ventilation system for management of Acute Respiratory Distress Syndrome

- Led engineering team in designing and delivering transportable functional liquid ventilation system prototype
- Created CAD of components and full system for modeling physical integration
- Awarded 2nd place in Design Competition and 3rd place in Autodesk Fusion 360 Competition at Cornell's 6th Biomedical Engineering Industry Engagement Showcase
- Guided design efforts and verification with focus on defined need criteria
- Integrated various designed/selected mechanical, electronic, and sensor components into a functioning system

2021
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2017

Children's Hospital of Philadelphia

Research Technician

📍 Philadelphia, PA

Lead investigator: A zebrafish model of Friedreich ataxia for drug screening

Lead investigator: Screening of random shRNA-expressing library in a cellular model of MELAS

2016
|
2013

Medtronic Diabetes

R&D Engineer

📍 Northridge, CA

- Collaborated with multiple functional teams to ensure developing product designs met product requirements, regulatory guidelines, and international standards
- Defined design requirements, specifications, and test methodologies for product in development to be in line with all patient needs
- Improved communication of patient/physician user needs (VOC) to engineering
- Guided team members on design verification and process validation activities for product development as a technical project lead
- Managed expectations of project supervisors and aligned team to milestone goals
- Brought validation protocols and documentation practices into compliance through extensive communication with FDA representatives as part of CAPA activities



EDUCATION

2022

Cornell University

M.Eng. in Biomedical Engineering

📍 Ithaca, NY

Related coursework: Project Management, Tissue Engineering, Stem Cell Bioengineering, Bioprocess Engineering, Computer-Aided Engineering, Data Science in R, Biofluid Mechanics, Entrepreneurship

2017

University of Pennsylvania

Certificate in Pre-Health (Pre-Med)

📍 Philadelphia, PA

CONTACT

✉ tl592@cornell.edu

in [linkedin.com/in/taehlee](https://www.linkedin.com/in/taehlee)

🌐 [133taehlee.github.io](https://github.com/133taehlee)

📞 +1 805-300-8160

PROFESSIONAL SKILLS

Project management, verbal and written interpersonal communication, user interviews, cGMP, integrity, independence, primary and secondary research, strong work ethic, attention to detail, implementation, team coordination, diligence, persistent curiosity, broad knowledge base

TECHNICAL SKILLS

Engineering analysis, medical device design, molecular biology techniques, statistical analysis (Excel, Minitab, R), CAD (Fusion 360, Solidworks), COMSOL, OQ/PQ/IQ, dFMEA, R, MS Project, MATLAB

PUBLICATIONS

10.1021/acscchemneuro.0c00323

10.1124/jpet.118.252759

2013



Northwestern University
B.S. in Biomedical Engineering
Related coursework: Systems Physiology, Tissue Engineering

📍 Evanston, IL