# TAEHEE LEE

Product development engineer with in medical/biotech product design and development. Seeking innovative projects that require a strong advocate for patients/users.



# RELATED EXPERIENCE



#### | Present

Emulate, Inc.

Product Development Engineer III

- Poston, MA
- Rapid product development in startup environment in collaboration with product management, biologists, and multiple disciplines of engineers
- Technical lead for design and development of next generation of microfluidic Organ-on-Chip device
- Identify and translate user needs into design requirements and specifications
- · Plan, execute, and manage
- · Transfer to manufacturing

2021 | 2022

# 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
- · Guided design efforts and verification with focus on defined need criteria
- Integrated various designed/selected mechanical, electronic, and sensor components into a functioning system

2017 | 2021

# 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

2013 | 2016

#### **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 through direct interaction with clinical sites
- 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

O Ithaca, NY

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

#### **University of Pennsylvania**

Certificate in Pre-Health (Pre-Med)

Philadelphia, PA

Related activities: ER student volunteer, surgeon/physician shadowing



### CONTACT

in linkedin.com/in/taehlee

133taehee.github.io

**J** +1 805-300-8160

#### **PROFESSIONAL SKILLS**

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

# **TECHNICAL SKILLS**

Engineering analysis, product design, statistical analysis (Excel, Minitab, R), CAD (SOLIDWORKS, Fusion 360), GD&T, COMSOL, OQ/PQ/IQ, FMEA, molecular biology techniques, MS Project, MATLAB

#### **PUBLICATIONS**

10.1021/acschemneuro.0c00323 10.1124/jpet.118.252759

2017

2013

Northwestern University B.S. in Biomedical Engineering

Related coursework: Systems Physiology, Tissue Engineering

**♀** Evanston, IL