GRACE AHN

(310) 720-4552 | <u>grace.s.ahn@gmail.com</u> Los Angeles, CA

EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

School of Engineering & Sloan School of Management M.S., Engineering and Management

OLIN COLLEGE OF ENGINEERING

B.S., Mechanical Engineering

EXPERIENCE

NATIVE DESIGN

Business and Strategy Manager, Life Science

- Led and implemented new client strategy which led to \$1.1M in potential revenue.
- Build firm's point of view on the future of the lab that champions user-centered solutions within lab spaces.
- Expand firm's Life Science portfolio and new business opportunities in genomics, liquid handling, point-of-care diagnostics and lab automation.

EMULATE INC

Engineer III - Discovery Team R&D Lead

Served as product lead for two multimillion-dollar NCATS/CASIS grants in organ-chips-in-space microgravity research using Emulate's Organ-Chip platform. Completed missions include SpaceX CRS-16 in December 2018, SpaceX CRS-17 in May 2019, and SpaceX CRS-20 in March 2020.

Product Management

- Managed cross-functional team of 8 biologists and engineers allocated across two NIH grants.
- Collaborated with external groups in aerospace and manufacturing to develop payload features and debug hardware and software issues.
- Developed and managed aggressive development and verification schedule from concept to rocket launch
- Reported monthly experiment updates and data findings to grant executives.

Individual Contribution

- Developed microfluidics hardware and programmed experiment software to autonomously run bioengineering experiments for launch, travel, and station on the International Space Station.
- Led monthly Engineering Verification Tests in a BL2+ lab verifying nominal flow and pressure, experiment programming, sensing suite validation and bioengineering sterility.
- Responsible for making technical tradeoffs pertaining to biology requirements.

Engineer I

- Developed novel technologies to advance future Emulate products and platforms.
- Built fraction collector to automate biology experiments enabling higher throughput and sampling resolution.

WALT DISNEY IMAGINEERING

Ride Mechanical Engineering Intern

- Responsible for mock ride test for upcoming Disney Tokyo E-Ticket attraction. Modeled and simulated ride vehicle motion for upcoming Tokyo Disney E-ticket attraction through prototype construction and guest experience analysis using on-board sensing suite.
- Coordinated with Creative and Ride department directors to meet design and technical specifications.

BARRETT TECHNOLOGY

Mechanical Engineering Intern

- Designed hand webbing to safely ensure patient's grip onto Barrett's rehabilitation robot during physical therapy.
- Explored material and design improvements for the BarrettHand robot to have an IP44 rating.

SKILLS

- Design Research User Interviews Sketch Models Ideation Workshops User Journeys and Workflows
- Technical CAD (12 years) Rapid Prototyping (10 years) Microfluidics (4 years) Python (3 years) Embedded Systems (4 years) BL2+ Lab (4.5 years)

ADDITIONAL INFORMATION

- Patent Invented technique in biological sampling, media recirculation and pumping. <u>USPTO: 17/036652</u>
- Interests Accessible design, disability studies and advocacy, indoor climbing

Cambridge, MA 2021 - 2023

Needham, MA 2012 - 2016

London / Remote October 2023 – Present

Boston, MA 2016 – 2021

Glendale, CA Summer 2015

Boston, MA

Summer 2014