Eileen Thai's passion for healthcare was ignited by her relatives' health care struggles. As a hand therapy aide, she saw saw a wide variety of upper extremity chronic conditions, inspiring her to shift to design for prevention. Focusing on design and occupational environments to **optimize worker health**, she went into the **field of human factors and ergonomics!**

Through **dedicated NIOSH support** and a vibrant research community, without financial burdens, Eileen focused on academic pursuits that fostered professional growth and networking opportunities through COEH.

Still in the interview stage, Eileen is excited to graduate with her **MPH this May** and pursue a **career in human engineering** with a **focus in aviation and medical technologies.**

FOR MORE INFO

Scan the QR code for more information on our Research
For questions, contact coeh@berkeley.edu

FROM HAND THERAPY TO HUMAN FACTORS AND ERGONOMICS

HER THESIS

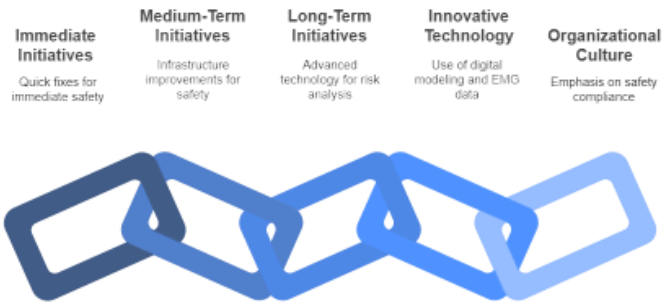
- Developed a predictive model for EMG-based normalized peak force
- Focused on identifying cost-effective & accessible predictors to predict hand force

HER BOEING INTERNSHIP

- Conducted a **validation study on ergonomics requirements**, collaborating with various departments such as Ergonomics, Environmental Health and Safety, and Engineering
- Gained insights **relevant for establishing guidelines regarding aviation and ergonomics**
- Honed self-development, enjoying a hands-off approach while still receiving guidance from mentors and preceptors
- Sharpened her organizational skills and ability to adapt quickly in this busy environment

HOW SHE SHARED HER FINDINGS

- Presented to Ergonomics, Environmental Health and Safety, and Product Development teams at BOEING, aiming to **inform future design requirements**
- Ongoing communications with these departments seek to clarify her research and explore ways to **integrate her findings into current practices**, emphasizing the **importance of ergonomics in aviation safety**



INJURY PREVENTION STRATEGY

NEXT STEPS

- Establish appropriate use cases for EMG in high-precision assessments
- Ensure that current short-term safety measures are consistently applied and audited, with clear accountability structures
- Research and pilot user-friendly, validated alternatives to EMG cuffs that support easier adoption and scale across diverse roles
- Develop training and communication strategies to increase awareness of the safety and performance risks associated with non-compliance