



Eileen Thai's passion for healthcare was ignited by her relatives' health care struggles. As a hand therapy aide, she 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

- Identify ways to incorporate EMG data without disruption to workflows
- Ensure short-term solutions are practiced & monitored for compliance
- Find cheaper & less complicated tools to replace EMG cuff use for easier adoption & widespread use among the workforce
- Expand understanding of consequences of noncompliance as a company embraces implementation and worker safety