GABRIEL AHERN

gabrieliahern@gmail.com | (281) 781-4421 | San Luis Obispo, CA 93405 |
WWW: gabrieliretonahernportfolio.com | **WWW:** www.linkedin.com/in/gabriel-ahern-a55513195

Experience

Mechanical Design Project Manager 09/2019 - 12/2023
EMPOWER - LLEAP | San Luis Obispo, CA

- Club Purpose: To design a fully-assistive lower-limb exoskeleton for user(s) suffering from paraplegia.
- Collaborated with other leads to lead new members, organize teams in club, and ensure all components integrable in full exoskeleton.
- Helped analyze stresses and loads on knee during walking and sit-to-stand motion to design knee joint of exoskeleton and utilized Solidworks CAD to model design.
- Manufactured prototypes of knee joint through 3D-printing and shop-based tools (aluminum model).
- Worked as go-between for prototyping and mechatronics
- Completed a biomechanically accurate model of knee joint (senior project) and assisted in club as a member.

Engineering Intern 06/2020 - 04/2021
Walters & Wolf Curtain Wall | Mukilteo, WA

- Designed and analyzed engineering drawings, models, and assemblies for curtain wall units.
- Developed/adapted Inventor Professional and Vault Professional to meet company specific needs in order to improve efficiency and modeling standardization.
- Facilitated transition from current modeling process (AutoCAD) to 3D-based modeling (Inventor-Vault-Fusion Team system); created and presented multiple presentations and led a class on Inventor modeling use.

Education

MBA Expected in 12/2024
California Polytechnic State University-San Luis Obispo | San Luis Obispo, CA

Bachelor of Science: Mechanical Engineering 08/2023
California Polytechnic State University | San Luis Obispo

- Concentration: Mechatronics
- Cal Poly Climbing Team: Coach
- EMPOWER - LLEAP: Project Manager/Member
- Biomechanically Accurate Exoskeleton Knee Joint, Senior Project: Worked in a team of 4 to develop an exoskeleton knee joint for the EMPOWER - LLEAP club that mimics the natural motion of the human knee. Was required to support the full load expected of one leg during walking and sit-to-stand motion and be lightweight and integrable in the full exoskeleton.

Skills

- Proficient in AutoCAD, Inventor Professional, Fusion360, and Vault Professional.
- Proficient in Solid Works CAD
- Proficient in Microsoft Suite
- Proficient in Java Programming, Python, C/C++, and Matlab
- Experience with rapid prototyping methods (ex: 3D Printing)
- Experience with general shop tools (Manual Milling, Metal Lathe, Welding, etc.)
- Experience in leadership positions and team management