

LARS HALLSTROM

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EDUCATION

University of Michigan, Ann Arbor MI

December 2020

Bachelor of Science in Mechanical Engineering

- Coursework with emphasis on practical design, modeling, real world integration, and hands-on testing.
- Elective coursework focused on human health and fitness, entrepreneurship and environmental business ethics.

Danish Institute for Study Abroad, Copenhagen Denmark

Innovation and Entrepreneurship in Europe

- Collaborated in a team to create mock startup company and pitch to venture capitalist investors in Helsinki, Stockholm and Copenhagen.

WORK EXPERIENCE

RESEARCHER | NORWEGIAN SCHOOL OF SPORTS SCIENCES, OSLO NORWAY

May 2019 – present

- Validated new athlete tracking technique by analyzing data collected from World Cup slopestyle events.
- Developed new technique for estimating athlete center of mass position from complete and partial 3D body models.

R&D INTERN | CENTRE OF HEATH INNOVATION – HOME OF THE INTERNET OF SPORTS, ÅRE SWEDEN

Sept 2018 – Dec 2018

- Created and applied code to time-synchronize video and wind measurements to a ski and snowboarding slopestyle course tool utilized for world cup events.
- Planned a product based on research for the consumer market with project leads and advisors.

DESIGN INTERN | BLACKBOXEFX, COPENHAGEN, DENMARK

May 2018 – June 2018

- Designed and prototyped an enclosure for electronic music device to launch company Kickstarter campaign.
- Acquired insight pertaining to management of a small company while working in a startup co-working space.

SKILLS AND ABILITIES

SOFTWARE

- SOLIDWORKS, MATLAB, Autodesk Inventor, Autodesk Fusion 360, 3D printing, HTML, Microsoft Office.

DESIGN

Instrumented Spatial Linkage for Biomechanics Analysis

January 2020 – April 2020

- Developed mechanical device to measure 3D position of shoulder joint to validate algorithm for body-worn inertial sensors.
- Implemented forward kinematic model to calculate overall humerothoracic angle across instrumented 6-bar linkage.

Michigan Neuroprosthetics Design Team

September 2017 – May 2018

- Designed a 3D printable neural-controlled prosthetic with a team for children in need, with specific focus on the phalanges to be used on the prosthetic hand.

Independent Design Projects

May 2017 – October 2020

- Designed and built a 36' long, cantilevered roof, boat shelter which required the management of a project budget, material procurement, work hours and project timeline.

COMMUNICATION

International Study and Internships

May 2018 – September 2019

- Managed remote research position run from Norway and Switzerland.
- Honed communication skills with people from different backgrounds, cultures, and languages.
- Worked with teams to meet tight deadlines while navigating unfamiliar surroundings.

Bicycle and Outdoor Equipment Salesman

July 2016 - September 2019

- Consulted with customers while considering budget, future needs, and return on investment.

LEADERSHIP

University of Michigan Nordic Ski Team President

March 2018 – March 2020

- Lead independent team of Nordic ski athletes organizing training and competition trips.
- Developed website and lead fundraising/equipment acquisition efforts.

University of Michigan Nordic Ski Team Vice-President

March 2017 – March 2018

- Organized team logistics for National Championship week in Lake Placid, NY.

INTERESTS

- Cycling, Nordic skiing, backpacking, cooking, woodworking