Jacob Cieply

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Objective:

Full time position in controls or mechatronics.

Engineering Experience:

Remora, Livonia, MI, *Controls Engineer, Controls and Mechatronics Consultant* **Dec. 2020-Present**

- *Controls Engineer II* **July 2021-Present**
  - Testing hardware, software, and electronics on benches, dynamometers, and on-road
  - Assessing system process performance and automating evaluation
  - Selecting and implementing sensors for lab-grade and automotive applications
  - Developing software to integrate external controllers
  - Analyzing drive cycles for device performance predictions
  - Designing and applying data link conventions to controller area network busses
  - Designing and implementing low and mid voltage harnesses
  - Working with harness manufacturers and expanding relationships with suppliers
  - Delineating error cases and ensuring appropriate corrective actions
- *Controls and Mechatronics Consultant* **Dec. 2020-April 2021**
  - Devised and implemented telemetry for prototype testing

Michigan Concrete Canoe Team, Ann Arbor, MI, *Captain, Hull Design Lead* **Sept. 2017-June 2021**

- *Captain* **April 2020- June 2021**
  - Led a team of 30 students to design and manufacture a concrete canoe
  - Guided the team to 6th place finish in the international competition
  - Managed sub-team leads on the final product and sub-team goals
- *Hull Design Lead* **April 2018-April 2020**
  - Designed and analyzed a series of boats using naval architecture software
  - Taught CAD and CAE to model and analyze the canoe

Melatonin Testing Kit, Ann Arbor, MI, *Entrepreneurial Lead, Mentor*, *Intern* **Sept. 2019-July 2021**

- *Entrepreneurial Lead (NSF I-Corps)* **May 2021-July 2021**
  - Interviewed 110 stakeholders in the circadian sleep market
  - Built a business model for at-home circadian phase testing
- *Mentor* **Aug. 2020-April 2021**
  - Tutored student on CAD, Arduino IDE, and circuitry basics
- *Intern* **May 2020-Aug. 2020**
  - Designed multiple printed circuit boards to control the testing device

Education:

University of Michigan, College of Engineering, Ann Arbor, MI **May 2021**
B.S.E. Mechanical Engineering, Minor in Music
Relevant Courses: FEA, Data Structures and Algorithms, Design for Manufacturing
GPA: 3.6

Skills:

Certificates & Awards: Certified SolidWorks Associate
Programming Languages: C++, HTML, Java, Ladder Logic, MATLAB/Simulink, Python, SQL, Structured Text
Programs: ADAMS, Altium 17, Autodesk EAGLE 9, COMSOL, Cura, Git, Hyperworks, MAXSURF Stability Suite, Microsoft Office, Microsoft Visual Studios, MSC NASTRAN, Rhinoceros 6, Siemens NX 11, SolidWorks, Sysmac Studios, VeSys
Manufacturing: chemical lab, general shop machines, lathe, mill, respirator, structural lab, welding (MIG/TIG)
Languages: French (beginner-intermediate)