**Education**

**Bachelor of Arts**  May 2024

Augustana College ● Rock Island, IL GPA: 3.8/4.0

Majors: **Computer Science** & **Engineering Physics**: *Concentration Mechanical Engineering*

Minor: **Mathematics**

**Awards** & **Honors**: Presidential Scholarship, Dean’s List x4

**Skills**

Applications: AutoDesk Inventor - GitHub - MS Office - Eclipse - Google Drive - Unity - Canva - Spyder

Strengths: Data Collection - Modeling - Teaching/Tutoring - Creative Problem Solving - Teamwork

Programing: Java - Python - Arduino - C++

Languages: English - Spanish

**Relevant Experience**

**Mechanical Engineering Research Project** Summer 2021 - Present

Augustana College & Michigan State University (MoNA Collaboration)

**Second Generation Raster Scanner**

* Designed and assembled a mechanically driven raster scanner using Autodesk Inventor Professional 2021 for the purpose of collecting radioactive decay data
* Collaborated with stakeholders from multiple institutions using a variety of live editing tools remotely to ensure project accuracy
* Upgraded the mechanism so that it produces a very low electronic noise to prevent fluctuations in the collection of data
* Reported the BOM for documentation purposes
* Directly purchased and 3D printed mechanical equipment as required
* Assembled equipment and troubleshot a variety of complications including missing parts, wrong dimensions, undesired mechanisms
* Calibrated Servo Motors to be able to reproduce exact motion as desired
* Created different functions using Arduino programming to be able to produce multiple desired trajectories
* Used Rotary Feedthrough to transfer motion from outside the box to the inside of it

**Teaching Assistant Physics** August 2019 - Present

Physics department Augustana College ● Rock Island, IL

* Assist and guide college students with their learning during physics lectures and labs to improve knowledge retention.
* Lead individual and small group tutoring sessions with struggling students to present material in different ways.
* Support the lead professor with record-keeping and preparing lessons to reduce professor workload.

**Design Group Project**        Fall 2020

**Mechanically Driven Hand Crank Herb Grinder**

* Designed different parts using Autodesk Inventor Professional 2021 as a CAD software.
* Completion of assembly of product, respecting tolerances and linking dimensions.
* Created 2D drawings and BOM for documentation purposes.
* Upgraded the product by designing different accessories for a better experience.
* Created animated simulations of the upgraded product.
* Lead the final presentation to showcase the efforts and the final product.