

# Zachary Muzzleman

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## EDUCATION

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**University of Delaware**, Newark, DE

*University of Delaware Bachelor of Science*

Major: *Computer Science* | Minor: *AI and Robotics*

Graduation: May 2022

**Cumulative GPA:** 3.33

Relevant Course Work Completed: Parallel Computing, Introduction to Algorithms, Data Structures, Discrete Mathematics, Logic Programming, Database Systems (Oracle SQL), Intro to Computer Vision, Intro to Data Mining, Intro to Machine Learning, and Artificial Intelligence

Course Work in Progress: Comp Biol and Bioinformatics, Operating Systems, and Senior Design (An ongoing two semester course where I work in an agile team environment with a client on a webpage using Django, Angular, and PostgreSQL).

## RELEVANT COURSE PROJECTS

- Python Stereo Vision Project
  - This project focused on stereo vision of an image. There were 3 different methods that I used: SSD algorithm, SAD algorithm, and NCC algorithm.
    - Was written in Python.
- My E-Portfolio
  - An online portfolio that I created during my free time. Display's many different projects I have worked on with photos and links to the GitHub repository.
    - Was written in HTML, CSS, and JavaScript
      - <https://zacharymuzzleman.com>
- LISP-Travel-Agent
  - A project from an AI course I took during the fall 2021 semester. This project aims to find the shortest path to a goal city from the start using an A\* algorithm.
    - <https://github.com/ZachMuzzle/LISP-TravelAgent>
- Python-Computer-Vision
  - This project has two parts. Part A involves convolving, reducing, expanding an image, using Gaussian Pyramid, then using Laplacian Pyramids, and then reconstructing the image from Laplacian Pyramid. Finally, we blend the images. Part B, an image is changed by doing a perspective transformation and an Affine Transformation.
    - <https://github.com/ZachMuzzle/PR1>
- Machine Learning Group Project
  - During the intro to Machine Learning course, we were given a final project where we were to pick any dataset from a web source and first present it to the professor on what we would need to do for the project, what may not work, and what machine learning method we would use.
  - We used a Bank Marketing data set that would predict an output based on 20 attributes with around 41,000 instances.
  - We found the accuracy of this dataset using two different approaches. First, we used pandas and sklearn python libraries. The second method used was numpy and pandas which was more built from scratch.
    - [https://github.com/ZachMuzzle/Final\\_Project\\_484](https://github.com/ZachMuzzle/Final_Project_484)

## SKILLS

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- Languages: Java (Intermediate), C language (Intermediate), Python (Intermediate), JavaScript (Intermediate), Lisp (Intermediate), SQL (Intermediate)
- Operating Systems: macOS (Advanced), Unix (Intermediate), Windows (Intermediate)
- Software: Visual Studio Code (Advanced), Eclipse (Intermediate), PyCharm (Intermediate).