# Jensen Holm

B.S in Computer Science & Data Science

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#### Education

**Grand Valley State University** 

2019 - 2025

Computer Science & Data Science

**Bachelor of Science** 

https://gvsu.edu

I am a rising senior in computer science with a minor in data science. I majored in statistics for two years before discovering passion for applying algorithms and math I learn through programming.

## Experience

Gentex May 2024 - August 2024

Machine Learning Engineer Intern

Zeeland, MI

https://www.gentex.com/

Very excited for this upcoming opportunity.

# White Pine Digital

September 2022 - May 2023

Software Engineer Intern <a href="https://whitepine.digital/">https://whitepine.digital/</a>

Grand Haven, MI

- Built backend REST API's for company applications
- Constructed front end web components using react
- Independently developed comprehensive image enhancement software
- Expanded the consumer database with ethical web scraping
- Balanced 25-30 hours per week of work with full time student status

## Kalamazoo Growlers

May 2022 - August 2022

Data Science Intern

Kalamazoo, MI

- https://northwoodsleague.com/kalamazoo-growlers/
- Analyzed data to find insights that improved on-field team performance
- Produced a Monte Carlo Simulation analysis system to calculate win probability and optimal lineups
- Operated the Trackman analytics system, which assesses the velocity, angle, rotational-speed, etc.
- Communicated data analysis in meaningful ways to coaches and players
- Operated Synergy cameras and sent data to all 30 Major League Baseball organizations

# **GVSU Computer Science Success Center**

September 2022 - May 2023

Allendale, MI

Student Tutor

https://gvsu.edu

- Instructed students on object-oriented programming in python using self taught programming knowledge
- Facilitated a drop-in style workspace, while handling multiple students at one time

## **Projects**

# **GPU Accelerated Quantum Scattering Theory**

December 2023 - present

https://github.com/Jensen-holm/GPU-Accelerated-QST

Undergraduate research project

**Backprop Playground** 

May 2023 - Present

ttps://github.com/Jensen-holm/BPPG

Hyper-parameter tuning machine learning API built from scratch

FireTCP

October 2023 - December 2023

https://github.com/Jensen-holm/FireTCP

Transfer Control Protocol package for the programming language mojo

## Monte Carlo Baseball Simulation

January 2021 - August 2022

https://jensen-holm-mlb-app-app-q1fw6t.streamlit.app/

Simulate baseball games between any MLB team from 1972 - 2021 in thousands of games

Go Python

Sklearn PyTorch
SQL MongoDB

Linux Git / Github

C/C++ R

CUDA Docker

Google Cloud Platform

Skills

React

Vim

Apache Spark Apache Kafka

Interests

Web API's

Machine Learning Computer Vision

Cycling Running
Chess Reading

**Awards** 

**Best Insight** 

Americal Statistical Association March 2023

2023 GVSU ASA DataFest

American Statistical Association GVSU DataFest Best Insight award

Relevant Course Work

Data Mining CIS-335

Grasped the mathematics and algorithms behind machine learning models like neural networks (backprop), k-means clustering, decision trees, etc ...

Multivariate Data Analysis STA-526

Learned and applied various multivariate data analysis techniques such as principal component analysis, logistic regression, clustering, etc ...

Information Management & Science CIS-360

Acquired still in data representation, modeling, storage, retrieval, processing, analysis, visualization, and science using the python machine learning framework sklearn, and software tools like Apache Spark and Apache Kafka to scale data applications.

System Level Programming CIS-241

Became proficient with the Linux command line and the systems level language C.