Liam Liden

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Education

Bachelor's in Computer Science and Economics
August 2017 - May 2021

Grinnell College

Major GPA: 4.0 Cumulative GPA: 3.89

Computer Science Coursework: Object Oriented Programming, Software Development, AI, Procedural Content Generation, Game Development, Computer Hardware and Architecture, Research: Data Driven Games

Economics Coursework: Macroeconomics, Microeconomics, Econometrics, Applied Game Theory, Managerial Economics

Projects

Tower Defense Statistics Game
May 2019 - January 2020

Grinnell College Mentored Advanced Project

- Played a lead role in the design of a statistics-based tower defense game by creating UML diagrams, organizing scrum, and managing team tasks.
- Built **PHP** and **MySQLi** database to support data collection, organization, and storage for statistical analysis and game features like saving and leaderboards.
- Implemented scripts in **C#** for a variety of features such as AI pathing, projectile movement, UI, and resource management.
- Presented progress reports and findings for faculty conference and departmental meetings.
- Game has been used in 100 and 300 level statistics courses by over 300 students in Grinnell College, West Point, and several other schools.

Giving Gardens Website
January 2019 - May 2019

Imagine Grinnell

- Developed web application to support and spread information about local giving gardens.
- Wrote database and back end code using **Ruby** alongside a team utilizing the **Agile Development Cycle**.
- Used OpenAPI specification and Swagger tools to create interactive API documentation, allowing for easier legacy code comprehension for future teams working on the project.
- Created comprehensive test suite to assure website operation before launch.

ShelfR
November 2018

HackISU

- Built **Android** app from the ground up with **Java** to track produce expiration dates, inspired by the hackathon's challenge of reducing food waste.

Breast Cancer Prediction Program
October 2017 - December 2017

Grinnell College

- Created a program in **Scheme** using the **Perceptron Machine Learning** algorithm to classify tumors as either malignant or benign with 97.4% accuracy.
- Discussed ethics of utilizing AI systems in the healthcare industry and the possible risks/complications involved.

Work Experience

Student Leader
August 2017 - Present

Grinnell College Information Technology Services

- Respond to technical incidents ranging from software/hardware problems to setting up computer systems for staff and faculty while managing the student workforce.
- Perform incident response through diagnosing priority, documenting in ServiceNow, and working with the customer to solve the incident to their satisfaction.
- Meet with upper management to present current state of the service desk, communicate the opinions of the student workforce, and plan long-term service desk projects.
- Worked with a team to revamp the organization's ticketing software to optimize worker performance and provide a better system for incident categorization and response time.

Skills

Languages: Scheme, C, C#, PHP, SQL, Ruby, Rails, HTML, CSS, JavaScript, and Java

Software and Technology: Eclipse, Android Studio, Unity, Bootstrap, and Node.js

Hobbies: Independent Game Development, Badminton, Cello, Basketball, Fishing, and Traveling