Liam Liden

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EDUCATION

Grinnell College Grinnell, Iowa

B.A. in Computer Science and Economics Major GPA: 4.0 / 4.0 GPA: 3.89 / 4.0

Dean's List: Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019

Member of National Honor Society

SELECTED COURSEWORK

Artificial Intelligence, Computer Hardware and Architecture (MIPS), OOP and Data Structures (Java), Discrete Structures, Software Development (Ruby on Rails), Functional Programming (Scheme), Game Theory, Econometrics, Seminar: Econ. of Crime

PROJECTS

Cave Generation

January 2020 - May 2020

Danish Institute for Study Abroad

Copenhagen, Denmark

Expected: May 2021

- Developed cellular automata algorithm to create natural looking cave systems in Unity.
- Improved generation time by developing efficient A* search heuristics to find shortest path connections between unconnected cave sections.
- Created fully customizable agent and item spawning system for game developers to use alongside generated caves.

Giving Gardens Web App

January 2019 - May 2019

Imagine Grinnell

Grinnell, Iowa

- Held weekly meetings with client while utilizing Agile development techniques.
- Created comprehensive test suite covering the range of system and unit tests.
- Integrated Swagger tools to create an interactive and informative API documentation.

RESEARCH

Educational Statistics Game

May 2019 - January 2020

Grinnell. Iowa

Undergraduate Research Assistant

- Played lead role in design by creating UML diagrams, organizing scrum, and managing team tasks.
- Built PHP and MySQLi database to support statistical analysis and game features.
- Implemented scripts in Unity for artificial intelligence, projectile movement, and data storage.
- Developed labs for intro and advanced statistics courses used by over 500 students at West Point, Grinnell College, and several other institutions.

WORK EXPERIENCE

Student Manager

September 2017 - Present

Grinnell, Iowa

Grinnell College ITS

- Respond to campus wide technical incidents for over 2,000 staff, faculty, and students while managing 30 IT student workers.
- Diagnose, document, and solve tickets concerning software, hardware, and tech setup.
- Work with team to revamp organization's ticket software to optimize response time and streamline incident documentation with ServiceNow.

TECHNICAL SKILLS

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

Technology: MS Office, Eclipse, Android Studio, Unity, Bootstrap, Node.js, Git,

Google Cloud APIs, Selenium