

# Alec Groseclose

## Experience

August 2024 - Present

### Shift Leader

Kerbey Lane Cafe - Austin, Texas

Ensure smooth service by managing kitchen and wait staff, addressing customer concerns, and maintaining food quality control

Contribute to creating a friendly atmosphere and ensure timely service to enhance the overall guest experience.

October 2020 -August 2024

### Service & Engagement Team Leader

Target - Austin, Texas

Led all aspects of front of store operations including cart collection, cash counting, scheduling, break management, cashiering, order pickup, returns/guest service, and overall guest engagement throughout the store.

Supervised a team of over 50 team members and was responsible for conducting performance conversations, coaching, and documenting team progress and development.

## Programming Projects

C# - Godot Engine - Multithreading

September 2024 - October 2024

### Infinite Voxel Terrain Generator

Built a chunk based infinite voxel terrain generator using the Godot game engine.

Optimized mesh generation using multithreading and a custom greedy meshing algorithm.

Wrote custom GLSL shaders to facilitate texturing chunk meshes and apply custom lighting.

GScript - Godot Engine - Custom ADTs

August 2024 - September 2024

### Conveyor Belt Distribution System

Created a conveyor belt based item distribution system for use in a factory automation game in the Godot engine.

Developed custom ADTs to divide conveyor belts into segments to allow optimized calculations of item movement.

Designed and created custom graphics and animations using Aseprite and Photoshop.

C# - Unity Engine - Compute Shaders

August 2022 - September 2022

### Falling-Sand Cellular Automata

Wrote a custom compute shader to simulate 2D particles of sand, water, wood, stone, and fire on the GPU.

Created an interface to handle sending input from the player to the GPU to allow player interactions.

Implemented custom control schemes, including destroying and placing cells, controlling the time scale, and resetting the simulation

## Profile

Email: alecrgrose@gmail.com

Phone: available upon request

LinkedIn: [www.linkedin.com/in/alecrgrose](https://www.linkedin.com/in/alecrgrose)

Website: [www.alecrgrose.com](https://www.alecrgrose.com)

## Education

Bachelors of Science in Computer Science

Minor in Mathematics

Texas State University - San Marcos, Texas

Expected Graduation Date: December 2025

GPA: 3.5

## Awards & Memberships

Dean's List - since 2023

Alpha Sigma Lambda Honor Society - since 2024

## Programming Languages

C# - 7 years      HTML & CSS - 1 year

C++ - 2 years      Python - 1 year

JavaScript - 1 year      GDScript - 1 year

## Relevant Courses

Data Structures and Algorithms / Fall 2024 - IP

C++, ADTs, Sorting Algorithms

Assembly Language / Fall 2024 - IP

Binary Operations, MIPS

Linear Algebra - Fall 2024 - IP

Linear Transformations in 3D Space

Foundations of Computer Science II / Spring 2024 - A

C++ basics

Discrete Mathematics II / Spring 2024 - A

Probability, Traversal Algorithms

Foundations of Computer Science I / Fall 2023 - A

C++ basics

Discrete Mathematics I / Fall 2023 - A

Logic Gates & Boolean Algebra