

CHASE SOUTHGATE

☎ xxx-xxx-xxxx

✉ southch07@gmail.com

🌐 [linkedin.com/in/chase-southgate](https://www.linkedin.com/in/chase-southgate)

🐙 github.com/southofthegate

Education

University of Nevada, Las Vegas

Expected May 2026

Bachelor of Science in Computer Science

Las Vegas, NV

- **Organizations:** Association of Computing Machinery (ACM), Layer Zero, Society of Asian Scientists and Engineers
- **Relevant Coursework:** Software Design, Data Structures and Algorithms, Systems Programming, Machine Learning

Experience

Lucid Motors

Expected June 2025

Incoming Software Engineer Intern

- Expected XR development team building immersive XR/VR/AR simulations and experiences using UE5 and Unity

Epic Games

February 2025 – Present

Engine Development Extern

- Expected engine developer with a focus in physics simulations, rendering pipelines, and gameplay mechanics

NASA

June 2024 – August 2024

Software Engineer Intern

- Designed and deployed component blueprints for core virtual reality interactions, implementing a bi-manual hand-tracking algorithm with utility in simulated XR EVA tools
- Engineered VR EVA simulation assets and algorithms for usage inside of NASA's XR Operation Support System, building out highly immersive lunar and martian environments in Unreal Engine 5 using C++ and Visual Scripting
- Contributed to deep learning-based virtual computer vision for precise object/asset detection within the Simulation engine, using Convolution Neural Networks for real-time processing and detection of simulated environments/events

Snap Inc.

March 2024 – May 2024

Software Development Extern

- Designed and created augmented and mixed reality experiences in the Lens Studio Development Environment, utilizing JavaScript, Snap API, and Blender
- Developed backend linkage for Snap API's VFXAsset to instanced World Assets for Lens Studio enabling dynamic and interactive visual effects that respond to real-world objects
- Engaged in comprehensive technical training in AR lens development within the Snap Lens Studio, building projects implementing Augmented Reality ideologies such as position tracking, 3D model integration, and graphic rendering

BLT SMRT

January 2024 – March 2024

Software Engineer Intern

- Contributed to contracted and open-source architecture tools and software, specifically in Autodesk development environments such as AutoCAD and Revit
- Developed and delivered directory management desktop application for Building Information Modeling (BIM) software within the .NET framework using C# and XAML for backend and frontend respectively
- Programmed and deployed Node.js telemetry server endpoints to collect product activity from PostgreSQL server, developing separate endpoints to gather SQL query results, database entries, and specific action types

Independent Roblox Game Studio

August 2022 – August 2023

Game Developer and Studio Founder | Lua

- Founder of Roblox game studio, leading and coordinating a cross-functional team of game designers and artists to deliver feature-rich game experiences on the platform
- Programmed physics-based movement scripts and asset based action scripts for deployment in final production, implementing 35+ local and client scripts in Lua using Roblox Studio

Projects

UE5 Virtual Reality Development | C++, Unreal Engine 5, Virtual Reality, Blender, 3D Modeling

- Developed smooth VR motion controller movement and realistic object collision interactions, physics bounded grab and hand mechanics, and virtual weight distribution on fifteen 3D graphic developed assets

Mountain - Roblox Physics Simulations | Lua, Roblox Studio, Blender, Vector Forces, Game Development

- Applied instances of body velocity and force vectors to simulate gravity and anti-gravity exertion, later implemented to make calculated launch trajectories in given directions

Relevant Skills

Languages: C++, C#, Python, JavaScript, Lua, HTML/CSS

Framework/Technologies: .NET, Git, Unreal Engine 5, Blender, Adobe Creative Suite