

# Chamar Williams

Computer Science Student

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*Philadelphia, PA*

- Computer Science student at Temple University with hands-on experience scripting and shipping Roblox experiences as a core developer and technical contributor. - Proven expertise in Luau scripting, and client-server networking architecture. - Skilled in debugging complex netcode issues, optimizing performance under latency constraints, and preventing exploitation in multiplayer systems. - Focused on backend infrastructure and game optimization. Bringing technical depth, problem-solving skills, and collaborative mindset to software engineering or game development roles.

## Work Experience

**Apprentice** Jun 2022 - Dec 2024

*Johnson Real Estate | Philadelphia, PA*

- Worked under guidance of experienced professionals learning best practices in property search, acquisition, and valuation.
- Gained on-the-job training in property maintenance, listing creation, and client interactions with prospective renters.
- Developed strong organizational and communication skills managing multiple property portfolios.

**Youth Worker** Jun 2023 - Sep 2023

*Concilio | Philadelphia, PA*

- Facilitated career exploration lessons for middle school students through the Philadelphia Youth Network.
- Planned and executed end-of-year culminating event for 100+ students, demonstrating leadership and event coordination.

**Event Staff** Jul 2021 - Jun 2023

*Sandy Hill Event Center | Philadelphia, PA*

- Assisted with setup and breakdown of event spaces, including tables, linens, and seating arrangements.
- Worked efficiently in fast-paced environments to meet event timelines and maintain high service standards.

**Youth Worker** Jun 2022 - Aug 2022

- Facilitated career exploration lessons for middle school students through the Philadelphia Youth Network.
- Planned and executed end-of-year culminating event for 100+ students, demonstrating leadership and event coordination.

## Projects

### Aspirer's Workshop

2024 - Present

- Developed core combat systems (abilities, hit detection, damage resolution) in Luau focused on responsiveness and anti-exploit patterns.
- Architected client-server networking flows for player actions and state replication, handling latency compensation and reducing desync in real-time multiplayer sessions.
- Collaborated with designers and artists using Git and task management tools to iterate on balance and player experience.

### Roblox Networking Sandbox - Prototype and Testing Environment

2024 - 2024

- Created isolated testing environment to prototype and benchmark different approaches to RemoteEvent rate-limiting and lag compensation.
- Simulated varying ping conditions to measure system responsiveness and trade-offs.

### Algorithm Comparator - Performance Analysis Tool

2024 - 2024

- Developed comparative analysis tool to benchmark and visualize performance metrics across different algorithmic approaches.
- Implemented data visualization, runtime analysis, and complexity evaluation to demonstrate algorithmic trade-offs and optimization strategies.

### Personal Developer Portfolio

2024 - 2024

- Built and deployed personal portfolio site using HTML, CSS, and JavaScript to showcase projects and technical write-ups.

## Core Skills

**Languages:** Lua, Luau, JavaScript, TypeScript, C++, C#, Python, SQL, Node.js

**Core CS Competencies:** Data structures and algorithms, computational probability and statistics, systems programming, operating systems fundamentals, software design and architecture, web development

**Tools and Platforms:** Roblox Studio, Node.js, Git/GitHub, VS Code, Linux, Discord APIs

**Specializations:** Client-server architecture, netcode and latency compensation, player-side prediction, anti-exploit patterns, object-oriented design, REST APIs, database basics

**Game Development:** Roblox scripting, RemoteEvents/RemoteFunctions, TweenService, input handling, animation synchronization, player state management, game systems architecture, UI/UX implementation, performance optimization

## Education

**Temple University** Present

**Bachelor of Science** Computer Science

**Community College of Philadelphia** Present

**Associate of Science** Computer Science

## Interests

Game development, cloud computing, DevOps practices, data analytics, data science