

# Xavier Cho

E : [cho.xavier.12@gmail.com](mailto:cho.xavier.12@gmail.com) | T : +1 (206) 708-9112 | [LinkedIn](#) | [Website](#) | [GitHub](#)

---

## PROFESSIONAL SKILLS

---

- Object Oriented Programming (OOP)
- C++
- OpenGL, Vulkan, Unreal Engine 4, Unity
- Gameplay / Graphics Development
- Java / Android Development
- 3D math

**Coding languages:** Python, C#, SQLite, JavaScript, MIPS assembly

**Developer Toolkit:** Agile, Visual Studio, TortoiseSVN, Pivotal Tracker, Git, GitHub, Firebase

## WORK EXPERIENCE

---

General Communication Inc. – **Security Analyst**

January 2018 – Present

- Maintained a server that prevents GCI from paying about \$120,000 a year in audit penalties and fines.
- Improved network visibility by 120% by ingesting logs into GCI's SEIM tool.
- Performed monthly phishing tests internally that prevented costs of \$426,623 from events such as the cyber-attack on Matsu and Valdez.

General Communication Inc. – **Analyst Intern**

June 2016 – December 2017

- Automated a point of sale report in Tableau that saved the company \$150,000 in man hours.
- Created HR's new Internal Training website through SharePoint's CMS using HTML and JavaScript.

## RELEVANT PROJECTS

---

### Brownian Motion (OpenGL & C++):

- Built a particle effect that quantifies random movement and collision detection.
- Implemented an interactive user interface for the player using mouse and keyboard.

### Skybox (OpenGL & C++):

- Improved rendering by using geometry instancing which reduced draw call overhead on the CPU.
- Computed scene management with an interactive camera toggling aerial and first-person views.
- Designed directional and ambient light manipulating GLSL to enhance a smooth look to the models.

### Class Scheduler Website (C#):

- Worked in an Agile environment and reduced worktime by 1/4 resulting in project completion.
- Programmed a web application the Engineering College uses to schedule classes.
- Improved UI and eliminated application crashes.

### Unity Portal Door (C# & AR Core):

- Programmed a portal with AR Core enhancing environmental understanding, motion tracking, and lighting for the camera.
- Created photorealistic rendering of virtual objects in daylight.
- Designed and tested a fully functioning mobile application.

### Unity Rail Shooter Game (C#):

- Created a smooth Star Fox like gameplay utilizing Unity's Timeline facility resulting in a cinematic look.
- Prototyped particle effects, collision detection, scoring system and UI.
- Designed cross platform controls in the level between PC and mobile.
- Built path finding on enemies.

## EDUCATION

---

- **Bachelor's in Computer Science.** University of Alaska Anchorage (Anchorage, AK).
- Specialized in Computer Systems Engineering
- Graduated May 2018.