

# XINGYU CHEN

385 Kaymar Dr, Amherst, NY 14228  
716-426-8573 ◇ xchen252@buffalo.edu

## EDUCATION

---

**University at Buffalo, the State University of New York (SUNY)**  
B.S in Computer Science, 2022  
Department of Computer Science and Engineering

*August 2018 - Present*  
Overall GPA: 4.0

## PUBLICATIONS

---

**FerroTag: A Paper-based mmWave-Scannable Tagging Infrastructure**

*Zhengxiong Li, Baicheng Chen, Zhuolin Yang, Huining Li, Chenhan Xu, **Xingyu Chen**, Kun Wang, Wenyao Xu*

- Accepted by ACM Conference on Embedded Networked Sensor Systems (Sensys), 2019.

## NOTABLE PROJECTS

---

**mRehab**

mRehab is a novel in-home rehabilitation system, using 3D printing technologies, smart devices and machine learning algorithms to provide feedback in long-term rehabilitation and advances the current standard of care.

**ALight Renderer Complex**

ALight Renderer Complex is a combination of various rendering technologies, written in C++, which is used for research and self-education purpose.

- **ALight Creator**, a Unity-Like Engine using ImGUI
- **ALight-OpenGL**, a OpenGL Renderer for ALight
- **ALight-Raster**, a CPU rasterizer for ALight
- **ALight-RayCPU**, a CPU raytracer for ALight
- **ALight-RayCuda**, a GPU raytracer for ALight using Optix

**ACS/Orange Lanuage**

A basic Programming Language running on DotNet framework.

**Another C Compiler**

a hand-written x86 C compiler written in C.

**Unity - Steam Networking Framework**

A low level networking framework for Unity Engine to achieve multiplayer through Steam P2P network services.

## TECHNICAL SKILLS

---

<b>Programing Languages</b>	Experienced in C/C++, C#, Python, scala,JavaScript Comfortable with Java,Typescript,Swift,VisualBasic,Assembly
<b>Markup Languages</b>	Html, Latex, Markdown
<b>GameEngine</b>	Unity Engine, Unreal Engine, GameMaker Studio
<b>3D Graphic</b>	OpenGL,Vulkan,CUDA OptiX,GLSL,
<b>Compiler</b>	Comfortable with Lex,Yacc.
<b>Machine learning</b>	Comfortable with Pytorch Had developed a Compiler Generator by self.

## EXPERIENCE

---

**Embedded Sensing and Computing Lab, SUNY Buffalo** August 2018 - Present  
*Undergraduate Researcher*

- Working as an Undergraduate Researcher under the instruction of Prof Wen Yao Xu.
- Implemented image-to-image GAN for millimeter wave sensing.
- Research on Smart Health for mRehab Project

**THICOS Studio** 2015 - 2018  
*Founder, Chief Programmer, Game Developer*

- Leading three people develop indie games using Unity Engine.
- Released a 3D sandbox game on Steam.
- Collaborate with other teams to develop projects

## AWARDS

---

Dean's List, Fall 2018, Spring 2019.  
 CSE115 Website Project Competition Winner, Fall 2018.

## PERSONAL TRAITS

---

Highly motivated and eager to learn new things.  
 Ability to work as an individual as well as in group.