# XINYI CHEN

College of Arts, Media, and Design Northeastern University, Boston, MA

+1 6149472928 | Email: chen.xinyi8@northeastern.edu | Portfolio | LinkedIn

#### **EDUCATION**

**Northeastern University** 

Boston, MA

September 2023 – Present

• Master of Science in Game Science and Design

The Ohio State University

Columbus, OH

• GPA: 3.39/4.00

GPA: 3.88/4.0

Graduation Date: December 2022

• B.S. in Computer and Information Science and B.A. in French

RESEARCH & PROJECT EXPERIENCE

### Northeastern University (College of Arts, Media, and Design)

Columbus, OH

Project Leader, Group of 5

January 2024 – March 2024

# Game Pattern Research & Development (Unity, Visual Scripting, C++)

- Explored gaming theories and patterns from existing games, implemented mini games to validate such patterns, and concluded solvable game design problems.
- Developed theoretical frameworks using Unity, Unity Visual Scripting, and C# for 2D platformer-style gameplay. Publish theories on Pattern Library gaming theory website for wider
- Using agile development process to managed group Trello board and broke down tasks

### Northeastern University (Khoury, College of Computer Science)

Columbus, OH

Project Leader, Individual Project

January 2024 – March 2024

## Game AI Pathfinding (Unreal 5, C++, Blueprint, AI, Search Algorithm)

- Implemented Dijkstra and A\* algorithms in the game AI for automatic optimal pathfinding, including obstacle traversal.
- Utilized Unreal Engine and C++ to develop a 3D chase-style game, enhancing AI's visual and environmental awareness with spatial functions.

## Northeastern University (College of Arts, Media, and Design)

Boston, MA

Project Leader, Group of 5

October 2023 – December 2023

#### **Educational Game Project "Forgotten" (Unreal 5, C++, Blueprint)**

- Ideated and developed an aesthetics focused educational game focusing on Alzheimer patients
- Utilized MDA design pattern and implemented MDA analysis
- Designed game mechanics reinforced by Alzheimer symptoms and composed team concept document

# Northeastern University (College of Arts, Media, and Design)

Boston, MA

Student Researcher, Group of 4

September 2023 – November 2023

# $Video\ Game\ QA,\ Ten\ Thousand\ Coins:\ The\ Golden\ Merchant,\ (Likert\ Scale,\ Google\ Survey,\ Research\ Graph)$

- Conducted comprehensive testing of all game processes and mechanics, documented potential bugs and evaluated UI/UX experiences
- Crafted a Google survey using Likert Scale, target audience for feedback.
- Organized offline and online player interviews, online playtests, collected data, analyzed with PXI equation and visualized results.

#### The Ohio State University (College of Computer Science and Engineering)

Columbus, OH

Student Researcher to Professor Jian, Chen, Group of 3

August 2020 – December 2020

# Unity Augmented Reality Game Project (Unity, C#)

- Developed an augmented reality mobile game with Unity introducing college campus to tourists
- Utilized Maya to model a 3D NPC in game and Vuforia Engine to map models to scenes in real world

### INTERNSHIP EXPERIENCE

**Tencent Game** 

## Internship (Unity, C#, Rust, Lua)

Chengdu, China

January 2023 – March 2023

- Self-taught rust programming language and Unity Machine Learning Agents
- Trained a Pac-Man NPC with Unity Machine Learning Agents
- Optimized the training speed, environment, and extracted reusable brain file
- Partook and contributed to the design of transportation simulator using A\* search algorithm

#### ADDITIONAL INFORMATION

#### Interests

- Video Games, literature, Member of Northeastern University Game Science and Design Student Committee Computer and Language Skills
  - Java, Python, C#, Ruby, C++, C, Rust, SQL, JavaScript, CSS, HTML, Adobe XD, Figma, Microsoft Team, Trello, Slack, GitHub, Discord, Chinese, English, French