MUZHOU, ZHAI

Bē https://mzhai.myportfolio.com | ✉ Muzhou_Zhai@thecdm.ca
○ https://github.com/mzhai-UofC?tab=repositories
☎ (587) 573 – 9370 (Vancouver BC. CA) | in Cathy Zhai | LinkedIn

App Development (3y)

Tool Development(1y)

Game Development(3y)

EDUCATION

Master's degree in Digital Media (Simon Fraser University)   2023 – 2025

✧ Software Engineering/ Human Computer Interaction/ Agile Development

Bachelor's degree in computer science (University of Calgary)   2014 – 2018

✧ OOP/ Data Structure & Algorithms/ Computer Graphics/ Networks Security

Certifications (Udemy)   2019 – 2022

✧ Building Applications with Angular, .Net, Microsoft SQL, and Stripe
✧ Unity 3D Game/ Engine tools Development and Programming (C#)
✧ Unreal Game/ Engine tools Programming (C++/ Python /C#)

KEY SKILLS

SOFTWARE DEVELOPMENT:

✧ .NET/ ASP NETCORE/ ANGULAR
✧ C/ C++/ C#/ JAVA/ PYTHON
✧ MS SQL/ MYSQL/ FRONT-END
✧ OBJECT ORIENTED DESIGN
✧ ENGINE TOOL DEVELOPMENT
✧ 3D MATH KNOWLEDGE
✧ INNOVATION&INVENTION
  (2 PATENTS APPLIED)

WORK EXPERIENCES

Assistant Technical Artist Co-Op (Co-op/ Full-Time)   Sep. 2024 – Dec. 2024

Electronic Arts (Burnaby, BC)

✧ Developed and maintained pipeline tools and systems using Python, JavaScript, and APIs to automate and optimize rigging workflows, improving efficiency by 70%.
✧ Built custom software and plugins to extend functionality in industry-standard applications like Autodesk Maya, Photoshop, Houdini, and game engines.
✧ Collaborated with artists and project managers to define requirements and refine tools based on user feedback.

Audio Programmer (Contract/ Part-Time)   Mar. 2024 – Sep. 2024

Studio x Labs (Vancouver, BC)

✧ Shipped as Audio Programmer for the pre-release of **_Dispatch_ (Action Indie Game) on Steam.**
✧ Integrated and managed audio assets (music, sound effects, dialogue) in Unreal Engine 4 using middleware tools like FMOD and Wwise.
✧ Designed, implemented, and maintained audio systems via C++, C#, Python, and Blueprints.

Game Designer (Permanent/ Full-Time)   Jan. 2023 – Jun. 2023

IGG Canada Inc. (Vancouver, BC)

✧ Shipped mobile strategy game **_Whalsea Legends_** available on Google Play
✧ Implemented and maintained UI system using C# and FGUI framework in Unity Engine
✧ Designed and created game design documents for game mechanisms, rules, and user interactions.
✧ Cooperated and helped with gameplay programmers and artists to develop game feathers.
✧ Game Research and analysis.

Indie Game Developer (Calgary, AB)   Apr. 2020 – Aug. 2022

✧ Independently developed **Survival and Adventure Game** *Infinite Dawn* (Full Demo Video)

- Designed game concepts, mechanisms, and rules. Organized all essential and potential requirements for each module. Finalized and subdivided each module into certain features and functionalities to achieve.
- Completed all areas of game programming, including coding, testing, and troubleshooting using C# in Unity. Accumulated plenty of real problem solving and troubleshooting experiences in game development while learning new technical skills rapidly.
- Designed and drew storyboards for each story scene and oversaw camera control for visual reality. Edited post-processing effects when needed. Edited and managed 2D/3D art resources, to make sure these resources presented the best visual effect that matches game concepts.

Data Consultant (Contract/ Full-Time)   **Apr. 2019 – Oct. 2019**
Calgary Airport Authority (Calgary, AB)
- Assessed, input, modified, and updated data records with documents.
- Utilized the online system and provided operations on enhancement and remediation of internal controls over data system.

AWARDS

- Awarded the Gerri Sinclair Award for Innovation in Digital Media, as the main developer for VR Electric Vehicle Battery Repair Simulator Project in Summer 2024 **(Project Demo Video)**
- Awarded a Technical Scholarship from Simon Fraser University in Fall 2023.
- Memorial Award for *The Christmas Pig* (JK Rowling 2021) children's illustration competition
- First prize in *My Little Planet* charity illustration competition for world autistic children's day 2022
- Participated in The 1st New Comics Original 4 panels comics Contest and won the award for nomination
- Successfully applied to 2 patents for utility models (CN201350158Y and CN20135007Y)
- Participated in the 2nd National Youth Creative Design Competition as the team leader, won the individual 1st prize and the team golden prize.
- Participated in the 23rd National Technical innovation competition and won the providential first prize. The entry Redesign for the *Life-Saving safety helmet* was selected as teaching material and published on the Technical Science textbook national-wide.