Ta "David" Yu

Game Developer, Gameplay/Tools Programmer
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WORK EXPERIENCE

BearBone Studio, Remote – Freelance Game Programmer
July 2023 – Present

- Work on narrative indie title Minds Beneath Us, which is planned to be released on PC in 2024. The game is made in Unity.
- Join the team in the late stage of the project and take on the role of a firefighting programmer who resolves bugs and optimizes performance bottlenecks proactively.
- Enhance existing UI systems to provide controller support and to ensure that they comply with console platform certification requirements.

Codeglue, Remote – Programming Intern
October 2021 – March 2022 (6 months)

- Worked on porting the Shadowrun Trilogy to all major consoles (PS4, PS5, Xbox One, Xbox Series, and Switch).
- Programmed an automatic asset replacement tool in Unity that extracts assets from the AssetBundles of the original PC build to substitute them for missing/corrupt resources.
- Demonstrated excellent skill in navigating and modifying a large legacy codebase. Worked with QA testers and successfully resolved multiple bugs with the extensive use of a debugger and the creation of customized tools tailored to tackle specific bugs.
- Created written documentation to effectively communicate tool usage to both technical and non-technical team members.
- Revamped several in-game UIs with game designers to improve UX and support controllers.
- Learned about tools for Xbox development.

Akatsuki Inc., Taipei – Game Programmer Summer Intern
August 2017 (1 month)

- Worked in a small team to re-design the tutorial for Tales of Link (a mobile title in the Tales series) using an in-house C++ game framework.
- Programmed a tweening library to animate instructions in the tutorial and make it more enjoyable to look at.

FEATURED PROJECTS

DYEngine (Game Engine) – Solo Developer
November 2022 – Present

- Developed a 2D ECS game engine in C++, utilizing SDL2, OpenGL, Dear ImGui, and EnTT.
- Implemented a scene editor with support for undo/redo operations and play mode testing.
- Built a custom code generator that parses custom macro keywords to generate code for user-defined type serialisation and interface logic for the scene editor.
- Created a custom GLSL syntax parser for managing render state in shader code.
- Added support for multiple windows in one game application.

Gerritory – Lead Programmer, Designer, Artist
October 2017 – October 2020

- Released on Steam and Nintendo Switch and has won several game awards since its debut.
- Led a team of 4 programmers remotely and communicated the requirements for code structure and core mechanics.
- Optimized and ported the game to Nintendo Switch. Including but not limited to draw calls reduction, improving game startup loading time and asset loading optimization.
- Implemented an in-game level editor with rect copying and undo/redo feature using command pattern for easier level creation process.
- Utilized steganography to save level data inside the screenshot image file of a level.

EDUCATION

B.A. Digital Games, Game Programming – Cologne Game Lab (CGL), TH Koeln, Germany
September 2019 – Present, Expected to graduate in July 2023

B.S. Computer Science – National Chiao Tung University (now National Yangming Chiaotung University), Taiwan
September 2014 – June 2018, Graduated (GPA: 3.86 / 4.30)

SKILLS

Development Tools

- Unity: 5+ years experience, with console porting (Nintendo Switch, Xbox) knowledge
- Unreal: Made a couple of short-term school projects with both Unreal C++ & Blueprint
- SDL2 (with OpenGL), FMOD, Dear ImGui, Entitas, EnTT, RenderDoc, Visual Studio, Rider, CLion, CMake, git, SQL

Programming Languages

- C++: Used to implement a custom 2D game engine for my bachelor project at CGL
- C#: Used professionally in Unity
- JavaScript + ReactJS: Made my own portfolio website
- GLSL/Unity Shader: With computer graphics knowledge

Languages

- Mandarin Chinese: Native
- English: Fluent, Professional level

RELATED AWARDS & ACHIEVEMENTS

Gerritory

- Best Design, Taipei Game Show, Indie Game Award 2019
- 2nd Place in Best Student Game, Indieplay China 2018
- Sliver in PC game genre and several other awards, Vision Get Wild 2018
- Official Selection, The MIX Indie Showcase at TGDF 2018

Other

- Academic Achievement Award, National Chiao Tung University