Roland Shum

Dev Ops Engineer

✉ shumwengsang@gmail.com   📞 (425) 301-0156 (text preferred)   📍 Greater Seattle Area

in linkedin.com/in/wengsangshum/   ↖ rolandshum.carbonmade.com/

SKILLS

Programming Languages
C++ | C | C# | Python | Java | PowerShell | Bash | YAML

Tools
Git | SVN | GitHub | AWS | Azure | GitLab | Docker

API / Engine
OpenGL | Unity | Vulkan

Operating System
Windows | Debian Linux

ACADEMIC PROJECTS

Dev Ops Engineer, *Department of Astromaterial Acquisition*   08/2020 – 04/2021

Team of 10 - C# | Unity
3D single-player PC voxel adventure game using Unity engine
- Setup Docker container that ran Unity on any given Linux server with the right hardware
- Setup private GitLab server CI/CD with YAML config file to run automated tests on merge requests
- Created an item crafting graphical tool so designers can modify the crafting experience graphically
- Created a bash script that fixes Unity editor bug, changing a 2 minute process to 10 seconds

Engine Developer, *Arc Apellago*   08/2019 – 05/2020

Team of 12 - C++ | Custom Engine
2D single-player PC action platformer; **Published on Steam** ⧉
- Automated test systems using AWS to continuously update school SVN from our private git repo
- Setup Azure build system that ensured that have caught 20+ unintended broken pushes
- Wrote ImGui reflection system that automated the burden of programmers writing engine UI code

Game Developer, *Deltablade2700*   01/2019 – 07/2019

Team of 11 - C | Custom Engine
2D local-multiplayer action platformer; Showcased in **PAX2019 + PAX2020**; **Published on Steam** ⧉
- Developed scene manager GUI that allowed programmers to change scenes anytime in-game
- Automated task management tool 'Airtable' to email programmers whenever task is updated
- Wrote automated test cases and checklist for visual effects to ensure build quality for milestones

PROFESSIONAL EXPERIENCE

Teaching Assistant for Game Project (GAM2XX), *DigiPen*   08/2020 – present
- Provided technical mentorship to ~38 Sophomore game teams writing custom C++ engines
- Helped setup CI/CD GitHub systems for 2 teams that automated builds for every push
- Identified 7 common issues in teams, and created 8 slide decks that teaches game designers, artists, programmers, and audio designers on how to mitigate said issues

Head Teaching Assistant for Low-Level Programming (CS315), *DigiPen*   08/2020 – 04/2021
- Wrote Powershell scripts to query Github to pull PR branch of the student's repository for grading
- Maintained GitHub Actions script that has graded 40+ students assignments over two semesters
- Wrote Python scripts that adjusted each GitHub Action to grade assignments appropriately
- Assisted 40+ 3rd year students with implementing memory debuggers in Linux and Windows

EDUCATION

B.S Computer Science in Real-Time Interactive Simulation   08/2018 – 05/2022

DigiPen Institute of Technology, Dean's List (x4)