Bokang Wang

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EDUCATION

Carnegie Mellon University, Entertainment Technology Center (ETC)   Pittsburgh, PA
Master of Entertainment Technology   *2021 - 2023*

The Hong Kong Polytechnic University   Hong Kong
Bachelor of Science in Computing   *2016 - 2020*

SKILLS

Programming Languages: C#, C++, C, HTML, CSS, Python, Java

Tools: Unity, Unreal, Visual Studio, Git, Source Tree, Perforce, 8^{Th} Wall

Game Development: VR, AR, Rapid Prototyping, Motion Capture

WORK EXPERIENCE

Rec Room Inc   Seattle, WA
Software Engineer (Unity/C#)   *Jan.2023. – Aug.2025*

- Developed over 30 user-generated content (UGC) chips and tools that enable core gameplay mechanics in UGC room, including core systems such as Interaction Volume, Custom Footstep Sound, Dialogue UI, Inventory UI Animation, and multiple 3D math chips; collaborated closely with designers to translate gameplay concepts into robust features.
- Contributed to the redesign of the MakerPen mobile UI, Rec Room's in-game creation tool, making it more intuitive, reducing input complexity, and boosting productivity for creators on mobile devices.
- Optimized memory usage across three first-party games *(Make it to Midnight*, *My Little Monster*, *Run the Block*) , reducing memory usage by ~10% and lowering crash rate by ~5% on low-end mobile devices.
- Built a custom Unity tool to analyze and visualize memory usage of in-scene UGC chips and tools, helping designers and engineers to quickly identify and resolve memory bottlenecks.
- Implemented Magnetic Snapping, a new object alignment system that enables players to snap objects together via magnetic points, making in-game building more intuitive. Built all the underlying 3D math logic for this feature.

Orta Interactive Studio   Pittsburgh, PA
VR Software Engineer Intern (Unity/C#)   *Jun. – Aug.2022*

- Developed *Romeo and Juliet - VR*, an interactive game to educate opera performers on acting and line-reading through virtual stage, using Unity engine in a team of 4.
- Recorded animation using the Motion Capture system and created a pipeline for processing Mocap data with artists.
- Responsible for all programming content developing and testing, including gameplay, UI, animation, sound, lighting.

PROJECTS

Theater ARchive, La MaMa Experimental Theatre Club   New York, NY
Web AR Developer   *Sep. – Dec. 2022*

- Developed an immersive Web AR archive experience on Niantic's 8th Wall platform as the solo programmer in a 5-member team to enhance the digital presentation of La MaMa's archival collections
- Implemented the entire front-end with HTML/CSS, ensuring cross-device compatibility and smooth performance.
- Designed and developed five interactive features, including a face filter for virtual masks, body tracking to embody stage puppets, and image recognition that made posters, props, and costumes interactive.

3D Data Visualization of Machine Learning, Google & ETC   Pittsburgh, PA
Producer, Programmer (Unity/C#)   *Jan. – May. 2022*

- Led a team of 7, served as the point of contact with advising professor and Google scientists, fostered productive team communication, managed the development process, and maintained development documentation and website
- Visualized 4 types of data in 3D environments through 5 interactive experiences with Google scientists using Unity
- Explored how to make Machine Learning engaging and accessible with 3 ML algorithms (K-means, Q-learning, Fast Fourier transform) and 3 platforms (PC, VR. Ultrahaptic)