

Kalpan Agrawal

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Summary: As I near the completion of my Master's degree in Game Science and Design at Northeastern University, I am eager to explore opportunities in the dynamic and innovative world of Game and XR development. My strong programming background and passion for immersive experiences drive my desire to work in Virtual Reality and explore new technologies.

As a creative problem-solver, I approach projects with a unique perspective that blends both technical expertise and design thinking. I am constantly seeking new challenges to grow my skillset and expand my knowledge. My goal is to join a team of like-minded individuals who share my passion for innovation and creativity in the Game and XR industry.

Education

M.S. in Game Science and Design (GPA: 3.8)	Northeastern University	2021 - Current
B.E. in Computer Engineering	University of Pune	2015 - 2019

Skills

Core Skills:	VR, AR, Scripting, Modeling, Rendering, Lighting, Animation, Texturing.
Languages:	C#, C++, Python, Java, JavaScript, HTML.
DCC Tools:	Unity 3D, Unreal Engine, Davinci, Photoshop, Illustrator, Godot.
Platforms:	Windows, Android, Meta Quest, HTC Vive, Pico Neos, Varjo, HoloLens 2.

Work Experience

Research Assistant for Game and VR Development – Experience Design Labs, NEU Jan 2023 – Current

- Designing and developing a Unity VR game with hand tracking for real-time interaction with a virtual robotic workbench. I collaborate with a research team to create a gamified experience for interacting with a Mujoco-based robotic environment, providing an immersive industrial work simulation through VR and robotics.

VR Developer Intern – Immersive Media Lab, NEU Sept 2021 – Dec 22

- Developed on latest AR and VR devices, using the latest Immersive technologies like Quests pro, Varjo VR-3, Pico Neo 4, etc.
- Implemented system optimizations to ensure the game runs at sufficient fps without sacrificing artistic vision on low-end devices.
- Collaborated with designers and engineers to solve lighting, rendering, programming, and graphics-related challenges. Worked with the design team to conduct user research to improve game environment experiences.

AI Engineer at AI Mulla Group Sept 20 - Aug 21

- Led team of 5 AI engineers undertaking the software development life cycle for client projects.
- Worked extensively on Python ML projects. The two among the many projects were a Face Recognition service for user login and Smart Chat-bot service for customer support.
- Used ReactJS for web-designing for the Company websites.
- Used C++ and Java to make pipelines to improve system performance, data flow.

Software Developer at AI Mulla Group Sept 19 - Aug 20

- Engineered modern Web-APIs with Java, JavaScript, and SQL Server databases.
- Developed innovative microservices and web services using Python and Java APIs.
- Deployed and integrated software from team, updating integration and deployment scripts for optimal continuous integration.
- Worked closely with product managers to define project requirements and create well-scoped roadmap for long term progress.

Software Intern – Technowings June 2018 - July 2018

- Develop and maintain Python-based software applications under the guidance of senior developers.
- Collaborate with cross-functional teams to identify and resolve software bugs and other technical issues.

Projects

- VR-Two-gether - Graduate Capstone:** A cross-platform two-player cooperative game in which one player uses a VR headset and controls and the other player plays on a PC.
- VR The Jury:** Developed a multi-platform "party game" re-creating the Eyewitness (VR Player) and Jury (Non-VR couch players) experience using 3D immersive and video to document a possible crime. The in-headset user is immersed in a 3D virtual SCENARIO and tasked with documenting a possible crime using a virtual camera-phone. Non-immersed players then act as jury and make individual verdicts about the case.