

Kalpan Agrawal | Game Developer

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Skills

Programming Languages: C#, Python, Unreal Visual Blueprint, C++

Software: Unity, Unreal Engine, Davinci, Adobe Suite (Photoshop, Illustrator, Premiere, Audition)

Platforms: Windows, Android, Meta Quest, HTC Vive, Pico, Varjo, HoloLens 2

Experience

Research Assistant for Unity VR Development – Experience Design Labs, NEU | Jan 2023 – May 2023

- Designed and developed a Unity VR game with hand tracking for real-time interaction with a virtual robotic workbench using Unity, C#, and C++. Used C++ to set up Game Logic, Mechanics and Gameplay Systems and Multiplayer connectivity.
- Collaborated with a research team to create a gamified experience for interacting with a MuJoCo-based robotic environment utilizing Unity's VR platform.
- Provided an immersive industrial work simulation through VR and robotics, utilizing advanced algorithms and technologies.

VR Developer, Immersive Media Lab, NEU | Sept 2021 – Dec 2022 (1 Year, 4 Months)

- Developed Mini-projects with latest AR and VR devices, such as Quests pro, Varjo VR-3, Pico Neo 4, using Unity3D, C# and C++.
- Implemented system optimizations to ensure the game runs at sufficient FPS without sacrificing artistic vision on low-end devices.
- Conducted in-depth research on VR/AR platforms and technologies, staying up to date with emerging trends and best practices.

AI Engineer at AI Mulla Group | Sept 2020 – Aug 2021 (1 Year)

- Led a team of junior AI engineers and oversaw the software development life cycle of Python ML-AI and C++ projects.
- Utilized C++ for back-end development of the company's application, features and making APIs.
- Developed Python-based ML projects, including a Face Recognition service for user login and a Smart Chat-bot service for customer support.
- Employed machine learning and AI algorithms to build predictive models and automated decision-making systems.

Software Developer at AI Mulla Group | Sept 2019 – August 2020 (1 Year)

- Engineered modern Web-APIs with C++, JavaScript, and SQL Server databases.
- 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 a well-scoped roadmap for long term progress.

Software Intern – Technowings | June 2018 – July 2018

- Developed and maintained C++-based software applications under the guidance of senior developers.
- Collaborated with cross-functional teams to identify and resolve software bugs and other technical issues.

Education

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| M.S. in Game Science and Design (GPA: 3.8) | Northeastern University | 2021 – 2023 |
| B.E. in Computer Engineering | University of Pune | 2015 - 2019 |