NEERAJ SINGH THAKUR
Game Programmer

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I am IIT Kanpur graduate, experienced in leveraging agile frameworks to provide a robust code for high level development having confident command over Unity3D, C#, C++. Skilled in AI, UI, 3Cs, Optimization, Render Pipelines, VR/AR. I am creative, self-motivated, critical thinker, excellent communicator and very passionate about games.

Work Experience

Centre for Content Creation, Game Programmer, *(Jan18 - Present)*
- Using IP characters to build game aiming to teach biology for **iOS** platform using **Unity3D** and **C#** *(VS code IDE)*
- In-charge of builds and debugging of **Android** platform. Using **Git** version control on Source Tree and Fork
- Built special skills, weapon auto-toggle, status & hit VFX, **gyro** camera mini-game and in-game alert system
- Adept in **AI**, **3Cs**, Animations, UI, **Shader Graph**, Debugging, **Optimization** and Scriptable **Render Pipeline**

Build Corner, Client Programmer, Freelancer, *(Nov 17 - Jan 18)*
- Wrote Surface Shaders from scratch in **Cg/HLSL** for VR **Oculus Go** to create realistic 'Tile Visualizer' with runtime editable patterns and most optimized Unity3D settings. System installed in over 10 major cities of India

Mech Mocha Game Std. Pvt. Lim., Game Programmer Intern, *(May 16 - July 16)*
- **Multiplayer unitypackage** ⬈**:** Built communication library layer using C# and Java. Used **Bluetooth API** & **Nearby Connections** and **Messages API** for offline and online communication for Unity3D and Android Studio

Indie Game Developer and Gameplay Programmer *(May14 - Present)*
- **Retro Snake3D** ⬈**: Procedural generated** levels| Android| Level Design| Game Balancing| Shipped
- **Chemical Carriageway** ⬈**:** Infinite runner| Android| Unity3D, C#| Performance, Size Optimization| Shipped
- **Mixed Reality Encyclopedia** ⬈**: VR/AR** edutainment android application for **Google Cardboard** built in 24-hours of **Microsoft** Code.fun.do hackathon at IIT Kanpur

(Visit my portfolio for more projects and information)

Publications

Reactive Display for Virtual Reality ⬈**:** Designed and built **3D interface** to browse through 360° contents in Virtual Reality and instigate feeling of discovery while exploring contents using **Homography** (Computer Vision) and dynamic field of view of cameras. Tackled the problem of nausea caused by existing interfaces by providing an intermediate interface. Paper published at **ISMAR** (IEEE Symposium on Mixed and Augmented Reality)

Technical Skills

Programming Languages	C# (3+ years); Cg/HLSL, C++, Java, Js, C (2+ years); MATLAB, Python, HTML
Game Engines and IDEs	Unity3D, Android Studio, Visual Studio Code, MonoDevelop, Sublime Text
SDKs and APIs	Google VR, Nearby Connections and Messages, Vuforia AR, OpenGL, Bluetooth
Version Control & Tools	Git (Source tree, Fork and Terminal)
Software Development Processes & Methodologies	Domain, Test-driven and Agile development, Continuous Integration and Delivery, Prototyping, SOLID, Scrum, Dynamic Systems Development Method

Education

Indian Institute of Technology (IIT) Kanpur, Bachelor of Technology, *(Jul 13 – Jul 17)*
Major: Materials Science and Engineering, *CPI: 8.0/10.0*
- Data Structure & Algorithms, Computer Science, Graphics, Fundamentals of Computation, Analytic Geometry Physics, Calculus, Trigonometry, Algebra, Design Patterns, Software Architecture, Object Oriented Programming