

# Aakash Makhija

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## Synopsis

- ❑ Currently pursuing **Masters in Game and Media Technology** from Utrecht University.
- ❑ A graduate **B.E (Computer Engineering)**.
- ❑ **Exhibited Leadership and Technical skills** through roles played in the various development Projects.
- ❑ **Adept in suggesting improvements** to existing applications and business processes for enhancing performance, operational ease and resolving potential problems.
- ❑ **Good interpersonal, communication and organizational skills** with proven abilities in team management, vendor/customer relationship management and planning.
- ❑ **Drive for Learning** exhibited through developing different Game projects.
- ❑ **Strong quantitative background** laid down by the undergraduate engineering studies in programming and logical thinking.

## Academic Credentials

Degree and Institute Name	University/ Board	CGPA/ Percentage	Academic Year
B.E(Computer Engineering) MGM's College of Engineering	Mumbai University	7.0	2018
HSC S.R Junior College of Science and Commerce	Maharashtra State Board	62%	2011
SSC Sri Ma Vidyalaya	Maharashtra State Board	74%	2009

## Skills

- ❑ **Programming Languages:** C#, C++, Python, Html
- ❑ **Frameworks:** CSS, Aframe, JQuery, Bootstrap
- ❑ **Operating System:** Windows, Ubuntu
- ❑ **Game Engine:** Unity Engine, Unreal Engine, GameMaker studio
- ❑ **Version Control:** Git, SourceTree
- ❑ **Databases:** Basics of MySQL

## Work Experience

### **253Games Studio (Apr'20-Sep'20)**

#### **Virtual Reality Software Engineer**

- ❑ Create VR experiences, which involves rendering scenes and developing animations.
- ❑ Develop ergonomic user interface for the player.
- ❑ Create synchronized avatar bodies for player.
- ❑ Prototyping and building with the virtual reality hardware (Oculus and HTC Vive)

### **United Gensets Pvt. LTd. (May'14-May'15)**

#### **Implant Trainee for Canopy Designer and Programmer**

- ❑ Analysed issues in the production system and the impacts of the problem on the objects affected and System's Performance.
- ❑ Map the product requirement and create a program for the production of the canopy.
- ❑ Co-ordinate effectively within a team of 38 developers, under the leadership of Technical Head.
- ❑ Handled effective Knowledge Transition by preparation of refined code for the production.

## Academic Projects

- ❑ **Small Project:** Limb Ownership during tasks in augmented reality. It was a research project in which my goal was create an experimental setup and define the factor that leads to the ownership of third virtual hand present along with the participant's both real hands. The technologies used are HTC Vive, Ovrvision camera pro and leap motion all in Unity.
- ❑ **8<sup>th</sup> Semester (2018):** Image Authentication and confidentiality using cryptographic techniques. It uses the cryptographic technique to protect and transfer classified information using RSA algorithm with the help of the Java Swings for GUI.
- ❑ **7<sup>th</sup> Semester (2017):** To Study and Simulate Denial of Service (DOS) Attack. To demonstrate the non-responsiveness of the system over the network due to the flooding of requests caused intentionally for malicious purpose.
- ❑ **5<sup>th</sup> Semester (2016):** Magical Number – Developed in Unity. It involves Binary Search algorithm to guess the number within a limited guess.

## Non-Academic Game Projects

- ❑ **Sword and Pistol:** A VR game where a player has sword in one hand and pistol in other hand. Technology used in building this is Unity game engine and Oculus Integration.
- ❑ **VR Social:** A multiplayer VR chatroom where a player can move around and interact with people and environment. Technology used in building this is Unity game engine, XR Interaction toolkit and Photon engine.
- ❑ **Spinner Top:** An AR multiplayer game in which a player selects a spinner top and battle against the opponent's spinner top. Technologies used in building this are Unity game engine, AR Foundation, ARCore and Photon engine.
- ❑ **Zombie Runner Game (2017):** It's a stunning 3D terrain game. It has built-in character controllers with AI navigation and pathfinding.

- ❑ **Block Breakers Game (2016):** A 2D game classic recreation of Arkanoid. A bat at the bottom of the screen is used to bounce a ball of bricks above, the bricks disappear after one or two hits. It covers 2D collisions, tagging objects, Triggering SFX & music, Moving objects with mouse etc.

### Activities / Community Involvement

- ❑ **Student Ambassador** of the Game and Media Technology programme in Utrecht university (2019 – Present)
- ❑ **Technical Coordinator** of the Computer Engineering department in M.G.M.C.E.T (2017-2018) Organizing and Participating in 'Mangalam' which is M.G.M.C.E.T college Festival.
- ❑ **General Secretary** of the Engineering department in M.G.M.C.E.T (2016-2017) Understanding the Student Issues and resolving them with the College Management and Organizing the College Events.

### Additional Interests /Skills

**Interests:** Playing Chess, Gaming, Coding, Swimming and Travelling.

**Languages:** English and German Level A1

### Personal Dossier

**Date of Birth:** 24<sup>th</sup> June 1992