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| **Shantanu Mane Logo - BW NoName** | **SHANTANU SHRIPAD MANE - GAMEPLAY PROGRAMMER**  **Phone No.:** +1-385-202-9752 | **Email:** [shantanu.m934@gmail.com](mailto:shantanu.m934@gmail.com)  **Portfolio:** [shantanumane.com](https://shantanumane.com/) | [linkedin.com/in/shantanusmane](https://www.linkedin.com/in/shantanusmane/) |

**EDUCATION**

**University of Utah** -*Expected Graduation - May 2019*

Pursuing a Masters in Entertainment Arts & Engineering - Game Engineering Track

**K.J. Somaiya College of Engineering, Mumbai, India** *- June 2015*

Secured a Bachelor of Engineering in Computer Engineering with *First Class Honors*

**SKILLS**

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| **Programming Languages -** C++, C#, Blueprints  **Game Engine -** Unreal Engine 4, Unity  **IDEs -** Visual Studio 2015, Visual Studio 2017 | **Version Control** - Perforce, Git  **Animation -** Maya, Flash  **Software Documentation -** Dia, Rational Rose, ArchStudio Archipelago |

**GAME PROJECTS**

**MaVRick** - *Gameplay Programmer - UE4, Blueprints*

Published April 2018 on [Play Store](https://play.google.com/store/apps/details?id=com.WildWestWorkshop.MaVRickMobileArena) and [itch.io](https://teameetings.itch.io/mavrick)

* An action game where you pinball and charge at enemies with your fists to send them flying out with an explosion.
* Implemented a spawn system allowing to create desired intensity in the game by tuning the difficulty of each set of spawned waves and the threshold to spawn every new wave.
* Worked single-handedly on the ‘Fighter’ enemy AI that blocks attacks from the front, needs to be stunned from behind before being able to take damage and can do a short-range charge at the player.
* Setup complete animation state machines for the ‘Fighter’ and ‘Shotgunner’ enemies.
* Designed player abilities and enemies to create intense and high-octane gameplay.

**Action Game Combat System** - *Gameplay Programmer - UE4, C++, Blueprints*

* Creating a combat system similar to that of Bayonetta, focusing on player input and combat mechanics.
* Implemented a system for chain attacks/combos based on input timing.
* Working on making a tree of nodes that each hold information about an attack which can be relayed to any enemies that are hit, for them to react accordingly.

**Combat System Paper Prototype** - *Game Designer*

* Designing a paper prototype using cards and a tiled map to simulate the mechanics involved in Action Game combat.
* Emulated critical timings and reactions by associating execution times with actions like the attacks, blocking and evading.
* Working on including mechanics to affect enemies in ways such as pushing, staggering, launching etc. in order to play out combat strategy.

**Project Jericho** - *Gameplay Programmer - UE4, C++, Blueprints*

* An action-adventure game with your ‘Ribbon’ and its traversal techniques as tools to conquer giant mechanical monsters.
* Implementing the player character’s ‘Ribbon’ technique and the abilities and mechanics tied to it like catching projectiles, move-speed burst and mid-air hover for action-style gameplay.
* Contributing to player-side design to create a unique character and resonating empowering abilities that make the player feel elegant and fierce.

**Warlocks** - *Gameplay Programmer - Unity, C#*

* A recreation of a MOBA-esque King-of-the-Hill PvP where you cast spells to fight and defeat other players.
* Worked on MOBA-style controls, unit selection and movement to be used with a mouse and keyboard.
* Implementing a well-rounded spell system with ability-specific interactions, cast times and cooldowns and a robust damage system to tie into it.

**MaVRick Rider** *- Gameplay Programmer - UE4, Blueprints*

* A VR shoot-n-slash game where you fight enemies and a giant boss on your bike like a fierce warrior.
* Worked on the swords on the player’s back, drawing and sheathing them, and hitting enemies.
* Implemented sword slashes based on how hard the sword is swung when unsheathed.

**Mad Cats** -*Gameplay Programmer - UE4, Blueprints*

* An action game where you destroy alien machines with your cannon-equipped cat-truck.
* Created a spawn system that could control the spawning of enemies across multiple lanes based on which are free.
* Implemented the ‘Gecko’ enemy AI to come up from behind and charge at the player.
* Worked on procedurally spawning hazards on the lanes of the road.

**OTHER PROJECTS**

**Memory Manager** -*System Programmer - C++*

* Created a memory manager in C++ that passes a robust unit test.
* Created a Dynamic Size Heap Allocator to allocate memory of requested size from the heap.
* Implemented Fixed Size Allocators for certain allocation sizes that use arrays of bits to track their memory blocks.

**Stick-Man Fight** *- Animator - Flash*

Published on [YouTube](https://youtu.be/MIk4PAED2iI)

* Created a frame-by-frame animation in Flash depicting a fight sequence between stick figures.
* Animated specific actions with special effects like trailing effects for kicks, screen shudder, blood spurt etc.

**RicoMonkey** -*Web Developer*

* Developed ‘RicoMonkey’, a personalized web page recommendation system based on web usage mining.
* Engineered the back-end using PHP, AJAX, and MySQL to record, mine and run algorithms on users’ data, and pull recommendations from a database of web page URLs.
* Formulated an algorithm to determine changes in web pages’ ranks/scores based on their popularity.
* Handled mouse click-triggered events using jQuery for actions like Adding Tags to web pages.

**WORK EXPERIENCE**

**Higher Eclectic Ground, Mumbai, India** *- July ’15 - Sept ‘15*

*Co-founder and Web Developer*

* Co-created an indie video game and art community that provides creative individuals exposure and a platform to connect.
* Involved in concept design and establishing a presence of the brand.
* Developed ‘Twitch Corner’ to fetch live-streams from twitch.tv for the site’s visitors to watch, using the Twitch API.

**ACTIVITIES & ACCOMPLISHMENTS**

* DotA player since May 2008 with a thorough understanding of the game’s systems and mechanics.
* Dota 2 player since the Closed Beta with currently 1500 hours played.
* Achieved 2nd place at a college LAN event for DotA in 2013.
* Event head for the Dota 2 LAN at K.J. Somaiya’s ‘Abhiyantriki 2013’ where I led a team to setup for the event, handle logistics and setup matches.
* Managed the Need for Speed: Most Wanted LAN at K.J. Somaiya’s ‘Abhiyantriki 2012’ where I was responsible for setting up races and handling logistics.
* Member of the ‘Computer Society of India’ student chapter for the academic years 2012-2013 and 2013-2014 where I worked in the preparations for college festivals.