+1-919-537-9807 225 Catalpa St, #205 San Mateo, CA

# **Summary**

I'm a data-driven hands on engineering leader who enjoys collaborating with people to build impactful products. I believe in servant leadership and thrive in ambiguity. I am eager about building products that can solve complex problems

## **Employment**

Technical Lead / Engineering Manager, Linden Labs

May 2017 - Present

## Sansar - MMO VR Platform

## Technology: C++, Python, Kafka, AWS S3, React, Kanban

- Led strategic gameplay features from inception to launch, increasing Day 3 user retention 3X
- Built commerce store which increased sales conversion and has a 90% traffic adoption rate
- Designed and developed chat and social features integral to the platform
- Identified and built infrastructure tooling to improve developer velocity across the organization
- Ran a highly productive full-stack team of 6 engineers spanning across geographic locations and job functions
- Hands on with design discussions, code reviews and pair programming with engineers
- Mentored engineers with diverse skillsets and supported their professional growth
- Assessed risk in the release process, and cleared the critical path for on-time delivery
- Improved transparency across stakeholders using Jira's Kanban methodology
- Collaborated closely with product and designers to deliver strategic business initiatives

# Lead Engineer, Cavium Inc. (acquired by Marvell Tech) SDK development

Feb 2014 - May 2017

## Technology: C, C++, Python, GDB, Valgrind

- Led the effort to open source SDK & helped shape SDK from inception to launch
- Reviewed APIs for performance & memory leaks
- Mentored junior engineers on the team
- Fixed memory leaks in the simulator from 1.9Mb to 0 bytes/packet using Valgrind
- Designed and implemented network topology to simulate single unit, multi-device communication

#### Software Engineer, nVidia Graphics

Oct 2012 - Feb 2014

#### Technology: C++, WinDbg

- Implemented power management and a tool which deals with hysteresis for Windows Blue & Win8
- Implemented display context switching on the fly between native GPU and nvidia GPU
- Lead initiative to ensure both new and old features are backwards compatible with changing hardware

## Software Engineer, WeAreHolidays Pvt Ltd.

Jan 2012 – Sep 2012

## Travel Web platform

# Technology: Java, JPA, Maven, Struts 2, Spring 3, MySQL, Guava

- Developed the core API of the product, with performance and design as its key focus
- Lead team of 3 people to build product from ground up and aggressive timelines

## Software Engineer, hi5 Networks

May 2011 - Oct 2011

#### Social gaming/commerce platform

Technology: C#, WCF, SQL Server 2010

- Developed commerce portal with a pluggable architecture integrating multiple payment providers
- Developed end-to-end Credit Card payment system with PCI security compliance

# Software Engineer(Contractor), Verizon

Nov 2010 - Apr 2011

# Technology: C++, Python

- Developing framework for inserting ads in HTTP live video streaming on server side
- Prototype adaptive bitrate video streaming media player on android OS

#### Software Engineer (Contractor), Electronic Arts

July 2010 - Oct 2010

FIFA 3DS (Nintendo 3DS)

Technology: C++, C#, Python

Implemented rendering primitives to support in-game User Interface elements in depth

• Collaborated extensively with the UI designer to get menu system working in game

# **Independent Projects**

• <u>WordsAway</u> May 2016 – May 2017

## Unity/Android Indie Game

## Technology: C#, Unity, Python

- Built this indie game from grounds up with the only engineer on the team and over 10K+ downloads
- Leveraged metrics to identify hotspots and improved player on-boarding from 20% to 80%
- Implemented Player Assist for balancing the game leading to better completion rates
- Architected Event Aggregator using publisher/subscriber and generics for decoupling modules
- Developed a level editor for game designers to adjust the game play & build new levels
- Enabled artists to associate FX prefabs with game events by implementing generic Unity components
- Procedurally generated letters optimized to use only one sharing material / texture atlas
- Implemented menu navigation (including popups) by dynamically loading different scenes

#### • HoloHear (Hololens)

- Developed app for people with hearing disabilities to translate words to sign language in real-time
- The app won first prize amidst 20 teams at the Microsoft SF Hololens hackathon

## • Kolor (PC)

### Technology: C++, OpenGL, Qt Framework, Boost, OpenGL Mathematics

- Designed 3D First Person Shooter with a unique game mechanic of claiming enemies by colouring
- Developed collada-DAE importer to use 3D models into the game
- Generated Collision detection Bounding Spheres hierarchy information for the imported DAE model
- Implemented efficient hash-based collision detection/resolution for players and bullets

## • High Dynamic Range Images

## Technology: Matlab

- Implemented HDR algorithm to retrieve the original color response function for a natural scene
- Final image result closely resembles natural scene and lighting conditions as seen with naked eye

#### Education

MS (Computer Science)

**UNC**, Charlotte

May 2010 GPA: 3.8/4

• BS (Computer Science)

May 2006

U.P. Technical University, India