

# VIVEK VIDYASAGARAN

Programmer | Game Designer

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## EDUCATION | **CARNEGIE MELLON UNIVERSITY** 2014 - 2016

Masters in Entertainment Technology

## **VELLORE INSTITUTE OF TECHNOLOGY** 2010 - 2014

Bachelor of Technology in Computer Science and Engineering

**AREAS OF INTEREST** | Computer Graphics  
High Performance Computing  
Gameplay Programming  
Game Design

**SKILLS** | C++, Unity, C#, Python, CUDA

## INTERNSHIPS | **GOOGLE SUMMER OF CODE 2014**

INTERNATIONAL NEUROINFORMATICS COORDINATION FACILITY SUMMER 2014

Worked on a Neural Circuit Simulator called MOOSE. Implemented a parallel algorithm for simulating current flow between different neurons in a brain.

## **MOBILE GAME TO TEACH RELATIVISTIC PHYSICS**

CMU ETC, PITTSBURGH SUMMER 2015 - CURRENT

Creating a mobile educational game that gives players an intuitive understanding of the effects of relativistic physics like space contraction and time dilation. Uses the mobile phone's accelerometer and gyroscope for velocity tracking

## PROJECTS | **GOTAN: MIXED REALITY EXPERIENCE, CMU ETC, SILICON VALLEY** FALL 2015

A Minecraft style world-in-your room concept using Google's Project Tango to immerse players into a virtual representation of the real world and play through a simple game. Uses Project Tango's depth sensing to generate a voxel world corresponding to the real world.

## **INTERACTIVE CHILDREN'S EXHIBIT, CMU ETC, PITTSBURGH** WINTER 2015

An interactive exhibit to be installed in a children's museum that uses a top-down projection system and a Kinect sensor to get kids to exercise through play. Did part of the gameplay programming and worked on the Kinect sensing technology.

## **THE BEAT, THE STEP AND THE COWBOYS, CMU ETC, PITTSBURGH** WINTER 2015

A fast paced turn-based rhythm game where two players compete with each other, each trying to outwit their opponent. Featured in Rock Paper Shotgun.

## **BUILDING VIRTUAL WORLDS, CMU ETC, PITTSBURGH** FALL 2014

**Into the Dark** – An Oculus Rift experience where guests play the role of a bat flying through a cave and trying to catch bugs. Uses custom shaders and a unique sound input system simulating echolocation.

**Eagle King** – An exploration game where players control an eagle and explore a forest. Made using Microsoft Kinect. Implemented fluid bird motion with Kinect and enemy AI.