

# Roy Koganti

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## Education

**Carnegie Mellon University, Entertainment Technology Center (ETC), Pittsburgh** Aug 2015 – May 2017

- Masters of Entertainment Technology

**Carnegie Mellon University, School of Computer Science and Mellon College of Science** Aug 2011 – May 2015

- Bachelor of Science in Computer Science, Bachelor of Science in Mathematical Sciences, Minor in Game Design

## Skills

### Programming

- C#, C, C++, Python, Java, JavaScript, HTML/CSS

### Software

- Unity, Audition, Premiere Pro, Maya, Blender

### Courses Taken

- Artificial Intelligence, Computer Graphics, Parallel Computing and Architecture, Algorithms Design and Analysis, Web Applications Development, Computer Game Programming, Game Design Prototyping and Production, Role Playing Game Writing Workshop

## Experience

**Research Intern, Institute of Infocomm Research (I2R), Singapore** Jan 2009 – Feb 2009

- Worked in the Attention Deficit Hyperactive Disorder (ADHD) project. It aimed to improve I2R's Brain-Control Interface (BCI) system and design compatible games to implement in hospitals to treat children with ADHD.
- Coded and designed a BCI compatible 2D platform game, using Java, in under a month with no prior skills in computer programming single-handedly. My game was used in pilot trials with encouraging results, which eventually led to its use in clinical treatment.

**Research Assistant, Robotics Department, CMU** Dec 2014 – May 2015

- Participated in a research project focused on developing smarter, goal-oriented, action planning artificial intelligence for video game companion non-player characters (NPCs)
- Created a comprehensive game model for the planning algorithms to use, further developed the logic of the AI algorithm, created a prototype testing scene and programmed the AI of enemies. Tested and implemented code on Bethesda's Skyrim game

## Academic Projects

**Building Virtual Worlds (ETC), Programmer, Producer and Sound Designer**

- Worked in teams of 5 to create highly interactive games on a bi-weekly basis and changed teams every round.
- Utilized non-conventional platforms like the Oculus Rift, the Google Tango, Phidgets, PS Move and Kinect.

**Web Application Development Course, Final Project (CMU) – Keepin' It Realtime**

- Developed an interactive website using Django to host multiplayer games, made in the Unity game engine. These games can be played in real-time against other users of the site. Developed and hosted 3 multiplayer games, a platformer, a chess game, and a shooter.

**Parallel Computing and Architecture Course, Final Project (CMU) – Simulating Propagation of RNA Viruses**

- Implemented a C++ simulation of the propagation of viruses between humans in different types of environments. Coded the representation of the environments, programmed the behavior of the virus propagation and then integrated CUDA to speed up the simulation.

## Interesting Tidbits

- Huge Halo and One Piece fan
- I love stories, writing short stories relaxes me
- Enjoy playing sports, and basketball the most