

Heem Patel (Gameplay Programmer)

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EDUCATION

Carnegie Mellon University - Entertainment Technology Center (ETC), Pittsburgh, PA (expected) **May 2014**

Master of Entertainment Technology

National Institute of Technology (NIT), Calicut, India **May 2012**

Bachelor of Computer Science and Engineering

COMPUTER SKILLS

Languages: C/C++, C#, ActionScript. **Software:** Unity3D, Flash. **Tools:** SVN, Perforce, Visual Studio, Eclipse.

EXPERIENCE

Gameplay Programmer (Intern) at 1st Playable Productions, Troy, NY **June 2013 - Dec 2013**

Shipped Titles:

- **Letter Battle (iOS/Android):** An adventure game to teach spelling.
 - Created systems such as Battle System, Word Lists Manager, and World Map Manager using C++ and in-house tools.
- **Counting at the Dragon Café (LeapFrog handheld consoles):** Game for teaching Numbers to kids.
- **Ozzie & Mack ABC's (LeapFrog handheld consoles):** Game for teaching Alphabets to kids.
- **Stretchy Monkey's Super Day (LeapFrog handheld consoles):** Game for teaching daily routines to kids.
 - Helped implement audio, animations, and helped to fix bugs. Used C++ and in-house tools.

Programmer Research Assistant at EMIIE Lab, Simon Fraser University, Vancouver, Canada **May 2011 - Aug 2011**

- Scripted a game for a PhD student as a part of her project related to Game User Research.
- Collected telemetry and eye tracking data of users from the game.

ACADEMIC

Gameplay Programmer: Big Game Using Mobile and GPS (ETC Silicon Valley) **Jan 2014 - Present**

- Creating a cross platform big physical game for mobile phones, using Unity3D.
- Implementing systems such as ability to define playing field, team manager, puzzle piece manager, etc.
- Team of 7 people that includes 4 programmers, 1 designer, 1 artist and 1 producer.

Gameplay Programmer: Educational Games for SMALLab Technology (ETC Pittsburgh) **Jan 2013 - May 2013**

- Created tools and games in Unity3D, for educating middle school children using the SMALLab technology.
- Created a tool that fetched image, texts and video URL's from a spreadsheet and generated an interactive scene out of it.
- Worked with a team of 7 people which included 2 artists, 1 designer 3 programmers and 1 producer.

Gameplay Programmer: Building Virtual Worlds Course (ETC Pittsburgh) **Aug 2012 - Dec 2012**

- Created rapid prototypes of virtual worlds, each prototype was made in 2 weeks, and a cross disciplinary team of 4 people.
- Implemented the game mechanics, player movements, AI, animations, sounds etc. for the designed games, using Unity3D.

Programmer: Procedural Generation of Smart City (NIT Calicut) **Aug 2011 - Apr 2012**

- Developed a procedural city generator using XNA Studio 4.0 framework.
- Included organizational constraints, for e.g. schools were near residential areas, but the industries were far away.

Gameplay Programmer: Implementation of Adaptive AI for Pac Man (NIT Calicut) **Dec 2010 - Apr 2011**

- Implemented Pac Man and the ghost AI. We built it using Allegro library for C++.
- Developed an adaptive AI that changed difficulty based on players' level of expertise.

PERSONAL PROJECTS

Gameplay Programmer: Artificial Intelligence for a Simulated Soccer Game **Feb 2014 - Present**

- Implementing a simulation of soccer using Allegro library and OpenGL Mathematics library for C++.
- Implementing a state machine for the agents, message passing systems, and steering behaviors using 2D Math.

Gameplay Programmer: Stealth - Live Action Game Using PS Move for Global Game Jam **Jan 2013**

- Used Unity3D to implement rules of the game, audio, choose player as "It", and to check if a controller has been tapped.
- Won the audience choice award at Global Game Jam.