

Jacob Mills

Personal Information

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Personal Statement

I have been working as a game designer at Tt Games from the start of 2015, designing and implementing open worlds in the award-winning LEGO games franchise. I graduated from Queen's University Belfast with a Masters in Computer Games Design and Development, completing placements at Sony in London and Infosys in India. I am keen for opportunities to hone and expand my design skillset, to further my understanding of how design is approached in the industry, and to contribute to quality player experience.

Games Industry Experience

March 2016 – Present: Game Designer at Tt Games, Knutsford

February 2015 – March 2016: Junior Game Designer at Tt Games, Knutsford

November 2014 – February 2015: Junior Game Mechanics Programmer at Tt Games, Knutsford

Working in the hub design team, I often take ownership of an entire hub through the course of its development. I work with members of various other disciplines to ensure the hub is delivered on time and to a high standard. Specifically, my role consists of:

- ◆ Researching the licence on which the world will be based.
- ◆ Creating a blockout design of the entire hub in SketchUp, designing each event (puzzles, quests, races and other unique features) and condensing this into a design document for use as reference by every department involved. License holders approve these documents, so clarity and quality are essential to ensure that both their brand and Tt's commitment are well represented.
- ◆ Working with the environment art team to ensure the world is functional for gameplay.
- ◆ Working with the tech art, character, animation, code and audio teams to ensure each event is realistically achievable to a high standard within the deadline.
- ◆ Collaborating with other members of the hub design team to overcome design problems and brainstorm new features, or improvements to current features.
- ◆ Working with animators and mechanics programmers to design and polish character mechanics for hubs. For example, in LEGO Dimensions, Sonic runs faster and sticks to walls in hubs, allowing him to run through loops; this required a constant collaboration between all departments involved.
- ◆ Implementing events and features myself using Tt's level editing and scripting tools.

Working on **LEGO Dimensions** since joining the team I have worked on the adventure worlds for Scooby-Doo, The Simpsons, The Wizard of Oz, Midway Arcade, Mission: Impossible, Sonic the Hedgehog, LEGO City Undercover, Teen Titans GO! and Beetlejuice. Dimensions won the Game category at the Children's BAFTAs in 2016.

During a quiet period as Dimensions transitioned to its second year I worked on **LEGO Marvel's Avengers** from July 2015 to January 2016. I was responsible for the Manhattan hub, designing and implementing most of the events myself while training new team members who worked on the remaining districts.

June 2012 – July 2013: Software Engineer in Test at Sony Computer Entertainment, London

I had the good fortune to join SCEE in the run up to the PS4 release. During my time here, I:

- ◆ Taught myself the PS Vita SDK and wrote a one-player touch-controlled Pong variant.
- ◆ Worked with developers and testers to ensure stable releases of the SN Tools to licensees.
- ◆ Tested new PhyreEngine updates, maintaining the test plan and writing a suite of Python scripts to automate the installation of various permutations of the engine for testing.

October 2008 – December 2008: QA Technician at Free Radical Design, Nottingham

I was responsible for testing an unreleased blockbuster game title for the PS3 and Xbox 360, finding and logging bugs, glitches and gameplay quirks across the entire game.

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Other Work Experience

September 2013 – May 2014: Demonstrator at Queen's University Belfast

During my final year of university, I supervised practical sessions for second year students, assisting them with each week's tutorials, answering their questions and explaining any concepts they were unclear on.

July 2011 – September 2011: InStep Intern at Infosys, Pune, India

Working in the R&D department, I was tasked with researching and implementing a suitable user interface for a semantic search engine. I presented my findings and work to project leads at the end of the internship, having made the most of this incredible opportunity soaking in an all-new culture.

Education

2009 – 14: MEng Computer Games Development - Queen's University Belfast, 1st Class Honours

Level 4: Average of **73**, including a **74** in Individual Research Project (my dissertation)

Level 3: Average of **78**, including an **80** in Game Design II

Level 2: Average of **82**, including an **89** in Games Programming

Level 1: Average of **85**, including a **70** in Game Design

2008: A Levels - Maths, General Studies - **A**; Computing, Physics - **B**; Further Maths (AS Level) - **A**

2006: GCSEs - Maths, English Literature, English Language, Science (Double) - **A***; 3 As and 3 Bs

Projects

After university I participated in the Game a Week challenge for ten weeks. Below are summaries of my favourite two, but information on these and more can be found on my website: www.jacobmills.co.uk

Game a Week 10 – Go Right

This game is a 2D platformer with a twist; at the press of a button, the camera flips around and views the world from the opposite side. I used this to introduce a dual-world mechanic, where things are presented and behave differently between worlds:

- ◆ Moving platforms travel in the opposite direction and some platforms only exist in one world.
- ◆ The default world is snow-themed, the other world has a more electronic, techno feel.
- ◆ The music in each world reflects the visual style, but the tracks meld seamlessly at any point.

I used the duality theme throughout the game to create some light puzzle gameplay. I collaborated on this one with a few friends who made the sprite art and music, introducing the additional challenge of efficiently coordinating with them as well as conceiving, designing and implementing the game within the one-week deadline. Despite these challenges, I'm very proud of the result I achieved in just a week.

Game a Week 3 – Blink

The concept for this game came from thinking about how restricted fields of view are rarely used in 2D games but are an implicit requirement in almost all 3D games; I wanted to make a 2D game that relied on the player's inability to see everything at once. This game has a top-down viewpoint, the player controlling the avatar with the keyboard, directing their field of view with the mouse. The level is populated by enemies who are only visible when within the player's sight-cone, but only move when they are outside of it. To inform the player of unseen imminent danger, the enemies emit white-noise when nearby, getting louder as they creep closer. This results in a unique lo-fi horror experience, an excellent proof of concept the potential of which I'm excited about exploring at some point in the future.

Game Development Skills

Design Skills World design, puzzle design, character mechanics, design documents

Game Engines Tt Engine, Unity, PhyreEngine

Languages C++, C#, C, Java, Python, JavaScript, ActionScript, Lua, Lingo, Prolog

Source Control Tortoise SVN, Perforce, Git

Interests

I have been a keen video gamer my entire life and have developed an eager interest in the theory of game design since starting university. I have strong interests in literature and film, particularly sci-fi and fantasy. I enjoy listening to a bizarrely wide variety of music and occasionally try to keep fit by running.