# THOMAS GOODMAN AMBCS

## **MSci Computer Science Student - University of Birmingham**

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## **PROFILE**

I'm a Software Developer/Engineer, Event Organiser and Developer Evangelist with prior industry experience. I am looking for a year-long industrial placement at a friendly tech company who value personal development and would really let me utilise my technical, organisational and interpersonal skills.

I'm also a keen musician (pianist & singer), and really enjoy both performing and composing in my spare time.

## **EXPERIENCE**

## Analyst/Developer

## **Majestic (Majestic SEO)**

Dec 2016 - Dec 2016 ♥ Birmingham, UK

Following a successful summer internship, I was contracted by Majestic for a week to further work on a joint metric that I had done some work on over the summer.

- Independently worked to unify SEO metrics to create a single metric that accurately represented the data sets that the company has.
- Devised and documented an efficient method (single mathematical expression) to calculate the shortest distance from an arbitrary point to an arbitrary continuous function.
- The final metric is to be used to impact almost the entire client-base,
   and is already being used by the internal analytics team.
- Presenting the final result to the executive board and ensuring that a full handover of all work was conducted.

## **Undergraduate Demonstrator**

#### **University of Birmingham - School of Computer Science**

Following my first year at university, I was selected to be a module demonstrator because of my overall grades.

- I am predominantly responsible for mentoring the Software Workshop (Java) module, which consists of basic Java, as well as more advanced topics such as Threading, Sockets and Generics.
- Other modules include Language and Logic, Introduction to Al, Functional Programming, Data Structures & Algorithms and Robotics.
- Effectively teaching and/or mentoring content to students who are often completely new to the concepts, helping them to understand, and further, to learn them.
- Working alongside other demonstrators to ensure that help is provided quickly and efficiently.

## **EDUCATION**



# Computer Science - 1st Year - 81% Overall

[Top Modules] Language & Logic - 94%, Elements of Functional Computing - 89%, Formal Logic - 88%



#### A Levels/AS Levels

A\*AB (Computing, Maths, Chemistry)/ AB (Music, Further Maths)

## **ACHIEVEMENTS**



# Lead Organiser - HackTheMidlands

I founded, and headed up the organisation of a national, all-inclusive hackathon ( see hackthemidlands.com).



## CSS UoB President (@CSSBham)

I conceive and organise events that give students skills and experience that university may not necessarily give them, such as wider knowledge



#### **Clarifai Developer Evangelist**

I was selected as a Clarifai Champion in Autumn 2016, which is their initiative to shape upcoming developer evangelists.



## **Hackference 2016 Winner**

Support for Amazon's Alexa AI on Pebble devices (see https://t.co/MKtskw4tYK).



#### Winner - AstonHack 2015

A Java-based app using your Twitter data to display a gamified agar.io-esque data visualisation of Twitter interactions - https://devpost.com/software/tweat

## **EXPERIENCE**

## Software Developer

#### **Majestic (Majestic SEO)**

☐ July 2016 - Sep 2016 Birmingham, UK

% https://labs.majestic.com/2016

A 10-week placement at Majestic, developing innovative ways to represent and interpret their data. Mainly working on frontend & UX, but also working on some backend too. Predominantly HTML, CSS & JavaScript.

- Released the 2016 labs (see link) which contains the main project, a "map of the internet", as well as some smaller side-projects.
- Part of an autonomous team, and the joint-architect of a few innovative data visualisations, with the overarching brief of "showcase the data that Majestic has".
- The data visualisations created were used shortly after by the marketing team with the largest clients of the company.

## Project Lead - Ace of Spades

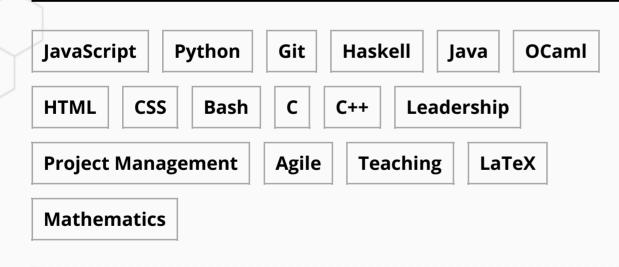
#### **JaGeX Games Studio, Cambridge**

% http://aceofspades.com

I was contracted by JaGeX to work on a past-dormant project - creating, implementing and testing innovative solutions to various problems, as well as managing what to develop and why.

- Major fixes to Ace of Spades, which is written in Python, and is a shooter game with hundreds of thousands of downloads.
- Liaising with a large, old and active game community to ensure that all updates were what the community wanted to see.
- Understanding, documenting, refactoring and working on a legacy code base that had remained practically untouched for over a year.

# **SKILLS**



# **REFERENCES**

Jess Rose - Head of Developer Relations, Crate.io

**Steve Pitchford - Development Director, Majestic** 

# **ACHIEVEMENTS**



### 2nd Place - HackTheHolidays 2015

Web-based app written using JavaScript with Angular that used your recent Tweets to work out your "Festivity Score" - http://festive.site/



## 3rd Place - HackTheHolidays 2016

Virtual Reality game for Android, written in C# using the Unity Engine with a Python backend - In which you play as Santa flying around the world and shooting down the 'evil presents' to save Christmas.



#### **BCS National Conference**

I gave a 25-minute talk on "Hackathons -Engaging the next generation of members", resulting in huge interest from many branches and kickstarted an interest in hackathons at the BCS,



#### **BCS Committee Member**

I have been involved in organising talks and events. I am now the Chief Engagement Officer of the BCS Birmingham Branch, which involves outreach and engagement within the local and wider tech community.



### **Teaching - John Taylor High School**

I was invited back to my former high school to teach students about computer science at university, version control and git and implementing the Norvig spellchecker in Python. The lessons were well received by both the pupils and the head of Computer Science.



## Peer Mentor - Functional Programming

In my first year of university, I was selected to run sessions for 10-12 students at a time on OCaml, which was part of one of our modules.