# Mark Edward Collins

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#### Personal Statement

I am an enthusiastic and dedicated Master by research graduand of Computer Scientist at the University of Lincoln. Equipped with strong experience; working with, quickly learning and even teaching in a variety of programming languages. Predominantly oriented towards high level OO development within C based Languages inside both Windows and Linux environments.

As a participant in a robotics team spanning six Universities and academic institutions across Europe known as STRANDS, my MSc project gave me direct exposure to large collaborative project utilising revision control and a methodology akin to Agile. Contributing towards the robots shared core applications and constructing simulation environments. My own project also allowed me to demonstrate a strong aptitude for independent working, decomposing a large research project into its constituent development chapters, establishing the approach, and resolving any problems alone, all within self imposed the deadlines.

# Development

Languages C++, C# (.Net), Python, Java, Bash, Shell, Actionscript 2/3, Flex, Air for

(Android / IOS), SQL, PHP, XML, YAML.

Tools Visual Studio (C# / C++), Eclipse (Java / C++), OpenCV, MATLAB, ROS

(Groovy | Hydra), Git, MySQL, Pointcloud Library, Flash Professional (CS4-

6), Blender, Make, Aforge, Apache, Flash Media Server.

Operating Systems Linux (Ubuntu / Arch / Fedora, XMBC), Windows, Android, IOS & OSX.

### Education

#### Master by Research

**University of Lincoln** 

Computer Science

October 2013 – January 2015

My thesis examined a recovery behaviour for re-initialising robotic navigation should it fail within a known space. Utilising a camera mounted atop a pan-tilt-unit the robot surveys it's environment to attempt to locate itself against a set of trained waypoints. Before further resolving its location through a novel Epipolar geometric based triangulation, akin to stereo vision.

#### **Bachelor of Science (Honours)**

**University of Lincoln** 

Computer Science (2.1)

UNIVERSITY OF

LINCOLN

*September 2010 – May 2013* 

The University of Lincoln is pioneering a new initiative known as 'Student as producer', structuring modules to accurately reflect real world industry, tweaking the curriculum and teaching styles to create assignments which instil good working knowledge of all areas of computer science.

#### **A - Levels (4) GCSEs (12)**

(2003 - 2010) De Lisle Catholic Science College

Business & Economics C, Design and Technology A, General Studies B, Mathematics C. 12 GCSE's Graded A - C. Including English, Math & Science.

A clean UK driving licence (Type B) National Pool Lifeguard Qualification (NPLQ) Basic ICT levels 1 & 2 Duke of Edinburgh Award

## Work Experience

## **University of Lincoln** – *Teaching Delivery Team*

### September 2013 – September 2014

During my Masters degree the University of Lincoln employed me as a demonstrator tutoring during undergraduate workshops. Assisting multiple lecturers in the modules; Computer Vision & Robotics (MATLAB / C# Forms - Visual Studio), Advanced Software Development (OO C++), and Networks & Network systems (NMAP, Wireshark, TCP, Cisco Packet Tracer etc).

#### **University of Lincoln** – *Bursary Robotics Engineer*

### **July 2013 – August 2013**

Having demonstrating considerable enthusiasm in the undergraduate module 'Computer Vision and Robotics' attaining a high first classification (76%). I was invited on a paid summer project, designing open-day behaviour for Universities new humanoid Robotics platform 'Linda'. During which time I was introduced to Python, Git and Blender. After which I presented my completed work in front of 350 new and returning computer science students.

## **Carphone Warehouse** - Customer Consultant.

## **August 2012 - January 2013**

A sale based job which required a combination of skills including; oral communication confidence, listening to customer needs, as well as sharp and up to date knowledge of the mobile phone market, in conjunction with knowledge of current sales. My responsibilities included; customer service, computer and till work, and the compilation of mobile contracts.

### **Loughborough University -** Catering Assistant.

#### November 2007 - September 2012

During my GCSE's I obtained a job serving students at 'Elvyn Richards' Dining hall, a catered hall at Loughborough University. Requiring me to be friendly and welcoming member of the service staff. For the last 5 years outside of term times, I have returned and carried out a number of jobs outside of term times, such as; bar catering and kitchen work, driving, and manual labour.

#### **Next** - Sales Assistant.

#### **July 2011 - January 2012**

During the busy Next summer next sale 10 temporary staff were taken on, I alone was kept on after the sales. Responsibilities involved customer service and till work.

#### **Serco Leisure** - *Lifeguard*.

#### May 2009 - December 2009

My energetic persona and passion for swimming led me to become an NPLQ qualified lifeguard. This training taught me to be able to work well under vital short time spans. Quick thinking and an ability to remain calm in difficult and challenging situations have been developed.

#### **Interests**

I like to maintain a particularly active lifestyle, predominantly through regular attendance to gyms, whilst also engaging in a number of physical group activities, most recently playing football at a social level once a week during my degree. Recreationally I pursue a keen interest in scientific literature and news, particularly; technology, astrophysics, robotics, automation and AI, through multiple online media, such as TED talks, Engadget, and gizmodo, supplemented by a subscription to Wired magazine atop more classical reading from favoured authors Carl Sagan, Neil Degrasse-Tyson, Richard Feynman and Stephen Hawking. Cosmos and A Brief History of Time being amongst my favourites.

Throughout my childhood and into my adult years I have been lucky enough to do a considerable amount of travelling of expanding my cultural and historical horizons. I particularly enjoyed my time in New York city, immersing myself in the in its uniqueness and diversity, a place I'd definitely like to visit again.

#### References

Reference available on request.