# Matt Luckcuck BSc (Hons), MSc, PhD(Ebor)

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## Summary

I'm a Research Assistant in the Department of Computer Science at the University of Liverpool. I graduated with a PhD in Computer Science from the University of York in 2016. My research experience has often required me to switch between several different tasks during a day, so I am used to organising and prioritising jobs. I have teaching experience at a variety of age-ranges and ability-levels, and have found it both enjoyable and rewarding. This has included both the development and delivery of teaching material.

## Work Experience

**2017 — Current** *University of Liverpool*

> **Research Associate** I'm a post-doctoral researcher on the Autonomous Robots in Hazardous Environments project, which focuses on autonomous robotic systems operating in a nuclear, offshore, or aerospace environment. The safety-critical nature of these systems requires verification to ensure that they behave as intended. I am looking at a range of techniques, including process algebraic models and temporal logic.

**2017** *York Learning*

> **Adult Education Tutor** I delivered a 6 week adult-education course teaching introductory programming skills using Python. This involved presenting a lecture and then guiding the students through Python programming exercises designed to reinforce the material in the lecture and teach them the basic practical skills of programming. The lectures and resources were designed by me from scratch.

**2017** *York Maker Hub*

> **Tutor** I taught children (ranging from 8-14) basic programming skills, in a busy environment that allowed the children some freedom in choosing the platform they used. The day-long sessions provide the opportunity for the children to build and program various projects on a variety of platforms, including Scratch, Makey Makey, and Lego Mindstorms. This role also involved supervising the children during breaks and lunch.

> **Curriculum Design** I also helped to develop a new pathway for older or more advanced children who wanted to learn programming. This involved reviewing the currently available projects, collaboratively designing new Python projects, and then writing up the project instructions sheets and resources.

**2015** *University of York*

> **Research Associate** During my PhD I was employed, part-time, to produce a tool that automatically translated program code for Safety-Critical Java into a formal model written in the state-rich process algebra *Circus*. This role was closely related to my thesis, so I managed the work alongside my PhD.

**2011** *University of Wolverhampton*

> **Support Desk Technician** I provided front-line support to students using the university's computer systems. This involved polite and timely responses to requests regarding printing and WiFi access, for example. Emphasis was on following standard operating procedures and escalating more serious problems to the relevant teams within the university.

**2010** *National Institute for Health Research*

> **Information Services Placement Student** During the placement year of my BSc I worked in the Service Desk, Testing, and Infrastructure departments. Each department presented its own set of tasks and challenges. Most of my time was spent in the Service Desk where I supported several hundred clinicians using a health research data collection system. I also spent several days leading the Service Desk team due to staff illness.

**2009** *The Mount Tavern*

> **Bar Tender** I served drinks and handled cash in a small, but busy, pub. I was occasionally left in charge of the bar, but more often I worked in a small team.

**2008, 2009** *Flair Event Staffing*

> **Festival Bar Staff** I performed a wide variety of service roles within both small and large teams, in a very busy environment.

> **Festival Build-Up Labourer** I performed a diverse range of manual tasks in small groups, with particular emphasis on precision and safety.

# Education

**2012 — 2016** *University of York*

> **PhD in Computer Science**
> *Safety-Critical Java Level 2: Applications, Modelling, and Verification*

**2011 — 2012** *University of York*

> **MSc with Merit in Computing**

**2007 — 2011** *University of Wolverhampton*

> **Bsc (Hons) First Class in Computer Science** including Placement Year
> Modules Include:

**2004 — 2007** *Castle College Nottingham (formerly Broxtowe College)*

> **A–Levels**

| | | | |
|---|---|---|---|
| English Language and Literature | B | Sociology | C |
| Psychology | B | Computing | C |
| Critical Thinking | C | | |

> **Other Qualifications**

> BCS ECDL (European Computer Driving Licence)
> C &  G Computer Installation and Maintenance
> NOCN Level 2 Photography
> RYA Day Skipper

**1999 — 2004** *Wilsthorpe Business and Enterprise College (AKA Wilsthorpe Community School)*

> **GCSEs**

| | | | |
|---|---|---|---|
| Double Science | BB | English Language | C |
| Design and Technology | B | English Literature | C |
| Maths | C | Statistics | C |

# Other Activities

- Volunteering at a local Code Club, teaching 9-11 year olds basic programming skills using Scratch. The small group was of mixed ages and abilities. Each week we worked on a small game, each introducing increasingly complex techniques.

- Organising a one-day academic conference aimed at doctoral students. I helped lead a small committee of other students to plan the conference, review submitted work, and run the event on the day.

- Assisting in the teaching of several modules aimed at undergraduate, postgraduate, and other doctoral students.

- Tutoring an A-Level Computing student, one-on-one. We focussed on covering key topics, and improved the student's exam grade by two grade boundaries.