


EZRA MASON

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WHO AM I?

I am a Masters of Physics student at the University of Surrey, looking to entry the Games industry. I have used my programming skills built up from my course to learn other languages like C++ and create gameplay prototypes for game jams, using Unity and C#.

Having participated in game jams, I know I enjoy working in a fast-paced prototyping environment and have gained experience in the multiple disciplines of programming involved in game development such as gameplay, UI and tools. I recently entered the Brackeys 2021.1 Game Jam and my game was 2nd overall out of 1890 entries. I am eager to join the industry and further my programming and software knowledge, develop new skills and coding experience with professionals, as well as learn about new technology.

As part of my degree I have undertaken a 11 month placement as a professional programmer in computational research, within which I used Unix command line, Python and Fortran daily. Through this placement, I have also strengthened my abilities in working within a cross-discipline team, along with a dedicated work ethic, open problem solving skills and time-management.

TECHNICAL SKILLS

Familiar languages and software include:

- C#
- Unity
- C++
- Python
- Fortran
- Maple Mathematica
- OpenMP
- MPI
- Gimp
- Blender
- \LaTeX
- Linux

EXPERIENCE

2020 – 2021

Computational Researcher

Soft & Condensed Matter Physics Group, University of Surrey

In this role I undertook computational research as part of a small team of 5 containing a range of specialisms including academics, Ph.D. students and fellow Masters students. Using my knowledge of Fortran and Python, I created numerical simulations of the model developed by the group for the stratification of polymer solutions. These simulations helped determine desirable polymer systems which would guide the experimental investigation. This involved writing maintainable, well-structured and high-quality code.

Additionally, the computational work also allowed for comparison between the simulations and the results of the experiments. This comparison involved closely working with the experimental members of the team by communicating my findings and ideas effectively.

EDUCATION

2017 – 2021

MPhys, Physics

University of Surrey

Expected Grade: 71% · 1st Class Degree

I have completed the first three years of a Masters degree in Physics, including a placement undertaking contemporary scientific research from 2020 – 2021.

Completed relevant modules:

- *Modern Computational Techniques* (82%) | Machine learning and parallel programming
- *Introduction to Astronomy* (76%) | Numerical simulation in Fortran and Python
- *Research Techniques in Astronomy* (73%) | Astronomy image analysis in Python
- *Fundamentals of Physics* (70%) | 3D Mathematics and Calculus

2016 – 2017

A-Levels

A · Mathematics, B · Physics, B · Chemistry

Farlingaye High School

2016

AS-Levels

C · Psychology

2010 – 2016

GCSE

11, of which 2 A*, 8 As and 1 B grade

EXTRACURRICULAR ACTIVITIES

Hobbies

I enjoy playing games of all kinds: from tabletop roleplaying games like the regular D&D game I Dungeon Master, to finding out the newest developments in video games by participating in early access releases.

The knowledge of programming from my course and placement along with the understanding of game design I have developed from taking part in game jams, has allowed me to further appreciate and understand the design and structures within the wide range of games I play. In particular, I enjoy participating in game jams in my spare time. The short deadline and limitations on theme allow for my creativity to flourish and to challenge me to write efficient code while making fun and interesting gameplay experiences. My entry for the Beginners Circle Jam #4 was ranked 3rd on fun/engagement out of 145 entries.

Outside of games I also love many outdoor activities like kayaking, power-boating, rock climbing and fencing. With my passion for kayaking and power-boating, I gained the required qualifications to assist in running sessions of these activities for my local Sea Scout group. Additionally, I was the President of the University of Surrey's fencing club and lead the club to successfully run a charity 24-hour fencing marathon. Personally, I have also won Gold at the Surrey County Intermediate fencing competition.

Additionally, as part of fueling my desire to learn new things, I am also teaching myself Danish.

Achievements

- Gold in Surrey County Intermediate Fencing Competition
- President of the University of Surrey Fencing Club
- Sectional Assistant at Local Sea Scouts
- Assisted in Running School Science Club
- Taught Sports at Local Primary Schools as a Sports Leader
- Bronze and Silver Duke of Edinburgh Award
- Young Leader at Local Sea Scout Group

Languages

- *English* - Native
- *German* - Basic
- *Danish* - Basic (Self-Taught)

REFERENCES

Prof. Zsolt Podolyak

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