Joseph Alexander Binns

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EMPLOYMENT

Study Support Mentor, *Lund University, Sweden* — *March 2021 – present*
- Providing one-to-one tailored support and coaching for BSc students at the Department of Physics.

Festival Steward, *Oxfam, Boomtown Fair & Reading Festival, UK* — *August 2019*
- Assisted at some of the UK's busiest festivals. Delivered efficient and proper radio communication as the acting supervisor handling critical medical emergencies.

Software Engineer, *Urban Mobility Labs, Bloomsbury, London, UK* — *July 2019 – August 2019*
- Lead development on a realistic, real-time 3D urban environment simulation using C# and the Unity game engine, for use by an automated transport planning system.
- Released the first build, establishing the core framework for future developments.

Baker, *Marks & Spencer, Bromley, London, UK* — *August 2018 – July 2019*
- Experienced daily customer interactions and regularly surpassed the company goals in a team oriented environment.

Conservation Volunteer, *TCV, Greenwich, London, UK* — *December 2016 – August 2019*
- Worked in a heavy labour environment in both leader and team player roles.

National Citizen Service, *UK* — *July 2016*
- Participated in 1 month worth of public speaking workshops and team building activities.
- Ultimately launched a successful pitch to philanthropists, for the benefit of local charities.

EDUCATION

BSc Theoretical Physics, *Lund University, Sweden* — *Aug 2019 – present*
- Notable Achievements: Elected as course representative for a number of courses on this prestigious program.

A Levels, *SFH Sixth Form, London, UK* — *July 2016 – July 2018*
- Selected Courses: [A] Physics, [A] Mathematics, [A] Further Mathematics, [B] Computer Science, [A] Extended Project Qualification

GCSEs, *Forest Hill School, London, UK* — *July 2011 – July 2016*
- Notable Achievements: Selected by my peers to be one of few school prefects, from a pool of over 1000 pupils.
  Recipient of the Academic Endeavour Award.

SELECTED PROJECTS

Raymarch Explorer — *April 2019 – August 2019*
- Currently developing a Real Time, Raymarch Explorer – capable of 3D Fractal Deep Zoom Renders.
- Working as a Software Engineer in both Java and OpenGL using the LWJGL.
- Utilising arbitrary precision mathematics on both the CPU and GPU.

Ludum Dare & GMTK Game Jams — *April 2019, August 2019*
- Frequently involved in the 48 hour Open Source Game Jam events.
- Worked as both a C# Software Engineer and Graphic Designer in the Unity game engine and Aseprite respectively.

***N*-body simulator** — August *2017 – March 2018*
- Developed a Real Time, n-body Gravitational Simulator and GUI.
- Worked as a C# Software Engineer in the Unity game engine.
- Through Telnet, the program accesses planetary data via the NASA Horizons database. The program utilises various complexity reducing algorithms for the optimisation of the large scale physics based simulation.

TECHNICAL SKILLS

Programming Fluency: C#, C++, Java, JavaScript, Python, MATLAB, LaTeX, HTML, CSS.
Libraries / Frameworks: LWJGL, Mapbox, Discord.js, Forge Networking, WordPress.
Additional Tools: Git, Visual Studio, Unity, Photoshop, Aseprite, Famitracker.