Euan Goodbrand - Stafford, UK

Linkedin: https://www.linkedin.com/in/euangoodbrand/ | **Telephone:** (+44)7956028983 | **Email:** euangoodbrand@gmail.com
Website/Portfolio: euangoodbrand.github.io | **GitHub:** https://github.com/euangoodbrand

Education

- **BSc in Computer Science** — University of Sheffield — *Sheffield, UK* — **09/2020 - 06/2023**

   First Class Honours. Relevant Courses: IoT (99%), Software Hut (92%), Introduction to Software Engineering (91%), Text Processing (89%), 3D Computer Graphics (87%), Finance and Law For Engineers (85%), Devices and Networks (84%), Web and Internet Technology (82%), Functional Programming (79%). Final year module average: 85% and awarded Memorial Prize for highest final-year examination results.

- **AA Foundation Award in Architecture** — Architectural Association School of Architecture — *London, UK* — **09/2019 - 06/2020**

   Architectural Design and Technology

- **A-Levels** — Denstone College — *Derbyshire, UK* — **09/2017 - 06/2019**

   Mathematics, Physics, Design Technology

Technical Skills

- Java | Python | C++ | Javascript | React | ThreeJS | OpenGL | MYSQL | PostgreSQL | Git | OOP | JUnit | VEX | Houdini | Blender |
- OOP | Unit Testing | Agile Development |

Soft Skills

- Proven ability to lead a team to meet client specifications (see awards) | Effective Communication | Problem-Solving | Highly Creative
- Strong Time Management | Constant Learner | Adaptive

Technical Projects

Procedural Modelling and Generation for Sandbox Games: Java, Python, Maven, Graphics
- Conducted a dissertation project exploring algorithms for producing game dungeon levels.
- Utilised Java, Python, and Maven to create 3D models and textures for dungeon levels through procedural modelling using state-of-the-art algorithms from relevant white papers.
- Successfully developed enjoyable, playable dungeon levels in sandbox games, enhancing game design and user experience. User testing and feedback were positive, showing successful completion of the specification.

OpenGL Graphics Scene: OpenGL
- Developed a 3D animated scene, demonstrating advanced graphics skills using OpenGL.
- Utilised hierarchical models and lighting for realistic, animated lamps and texture mapping.
- Enhanced user engagement with animated views, interactive camera controls, and a user-friendly GUI to control the animated lamps.

3D Developer Portfolio Website   JavaScript, React.js, Three.js, TailwindCSS, Framer Motion
- Undertook a project to develop a sophisticated 3D portfolio website leveraging modern technologies.
- Leveraged Three.js, React.js, and other tools to build and optimise a 3D portfolio website, including creating models, animations, and email functionality.
- Developed a high-performing, responsive website featuring engaging 3D graphics, highlighting reusable and scalable code.

Card Shuffling Product: C++, Embedded Software, aREST (Javascript, HTML, CSS)
- Preventing card shuffling cheating necessitates a unified hardware-software solution.
- Utilised C++, aREST interface, servo motors, and microcontrollers to build a product that merges embedded systems, web development, and 3D printed iterative prototyping with jam detection using ultrasonic sensors.
- Successfully created a system that prevents cheating in card shuffling without damaging cards.

- **Douglas Lewin Memorial Prize**: Awarded by the University of Sheffield for the best final-year examination performance in Computer Science.   **(2023)**
- **Software Hut Prize (Client)- University Of Sheffield:** This prize is awarded annually to a student in recognition of software development for a real-world client to develop the most effective software, following an agile development process within a team in close collaboration with their client**.**   **(2022)**
- **Python Programming Masterclass**: Completed a course on Advanced Python Programming, Udemy.   **(2022)**
- **Design Technology Award**: Awarded to the top student in Design and Technology at Denstone College. The only student ever to achieve this award for both years of the course.   **(2019)**

Interests

- **3D Printing**: Often design and create 3D prints. Interested in prototyping for product design but also sometimes just for fun.
- **Visual Effects**: Strong interest in VFX and graphics systems and creating visual effects using code and procedural generation techniques.
- **Chess**: Began playing chess over lockdown, resulting in thousands of games played since.