BRUNEL CREATIVE

For more information please contact:

Dr Baljinder Ghoman
Business Development Manager
Research Support & Development Office (RDSO)
Brunel University London

baljinder.ghoman@brunel.ac.uk
+44 (0)1895 268735

Brunel Creative is a gateway to our work in the use of digital technology across the arts, sciences and engineering. Our expertise is drawn from the depth and breadth of our research and our teaching. We create original narrative, content, and design concepts. We use state-of-the-art facilities to explore applications and develop solutions to advance understanding of the digital experience.

We work with:

- Media & Entertainment, Artists & Designers, Architects & Engineers
- Museums & Galleries, Archives & Cultural Heritage
- Schools & Colleges, Councils & Local Authorities
- Charities & Community Groups, Health & Social Care

1. Digital Design: Brunel designers are creating stories using digital media to bring them to life. We explore the practical aspects of digital design to create digital assets and storytelling for entertainment, design and for cultural heritage. Our work provides insights into the development of digital products, services, and experiences to help businesses engage with customers and audiences.

CEPROQHA is a project to preserve and restore Qatari cultural heritage. Using advanced Holoscopic 3D imaging, Brunel researchers have achieved accurate and easily accessible replication of real cultural heritage assets. With the digital model rapidly becoming the representation of a cultural heritage asset for anybody, anywhere, at any time, our work is changing how we visualise and manage the curation of cultural heritage, its analysis and its showcase.
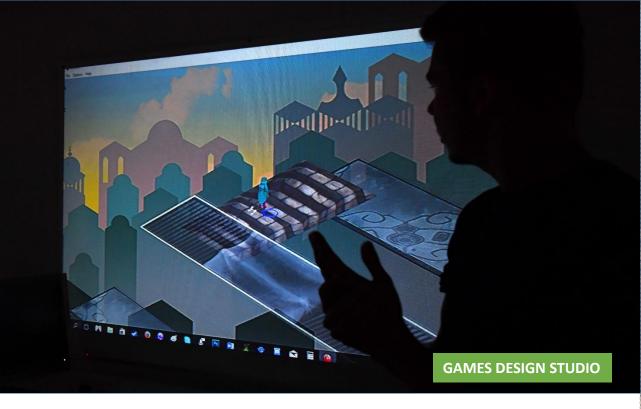
MOTION CAPTURE STUDIO

GREEN SCREEN STUDIO

2. Human-Computer Interaction: Brunel engineers are using their knowledge of product and service design to develop solutions for disabled or impaired users. Working with end-users our work is redefining best practice to encourage the adoption of inclusive design. We are applying our knowledge to develop the next generation of digital products and services for the benefit of society.
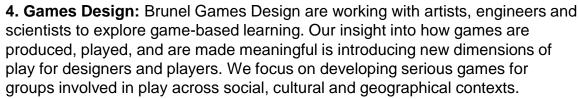
Falls Sensei is a serious 3D exploration tool for older adults to enable the detection of extrinsic trip and fall hazards within the home. As a first-person 3D game, Falls Sensai raises awareness of hazards in the home by simulating risk, enabling older adults to take the appropriate decisions about their own home. Falls Sensei is changing the way in which we perceive and educate ourselves about potential fall and trip hazards in the home.

3. Digital Stories: Brunel researchers are using creative writing, social-political science, psychology, arts and humanities to develop the narrative behind digital content. Our work explores complex issues through lived experiences, which we apply through screen and media . We work on diverse subjects such as gender and sexuality, urban space, digital cultures, human rights and the environment.

Rights Hero is a mobile app to help displaced children learn their human rights. Researchers from Law and Games Design worked with the Network of Children's Rights in Greece to design and successfully test game mechanics with refugee and migrant children. We are using the app as a learning tool to empower vulnerable young people with low self-esteem and diminished cultural pride to support healing, integration into society and a sense of normalcy.

GAMES DESIGN STUDIO

MIXED REALITY DEMO

4. Games Design: Brunel Games Design are working with artists, engineers and scientists to explore game-based learning. Our insight into how games are produced, played, and are made meaningful is introducing new dimensions of play for designers and players. We focus on developing serious games for groups involved in play across social, cultural and geographical contexts.

Cultured Meat looks at the development of edible artificial meat from a sociological perspective. The player runs a lab to develop commercially-viable, culturally-accepted cultured meat. The game takes you through the stages of development of the meat from a scientific perspective and real events in the history of cultured meat, adding perspectives related to PR and funding to help players understand the difficulties faced beyond those of pure science.

5. Immersive Technologies: Brunel researchers are developing interactive 3D environments for heritage, education, and entertainment. We work with Graphics Design, Motion Capture, 3D Film Design, Green-Screen and Post-Production to deliver unique insights and understanding. We stimulate interaction between the physical and the virtual by creating rich AR/VR and mixed reality experiences.

Sutton House Stories is a project about a Tudor house where Brunel are exploring affective storytelling using smart glass Augmented Reality. Cultural heritage sites are physical places that not only offer the physical structure but also stories that surround a historic site and a rich playground to design affective narrative. Our work is developing a framework for designing smart glass Augmented Reality experiences in cultural heritage, for situated learning.

DIGITAL ART - PERFORMANCE LAB

AERONAUTICS SIMULATOR

6. Digital Performance: Brunel artists are using practice-based research to explore crossovers between the physical and virtual world across dance, theatre, music, new media, fashion, engineering, and new ideas in human-digital performance. Our artists fuse contemporary practice with projection, motion tracking, and wearables for live performance and multimedia installations.

Moveable Worlds explores digital scenography practices that connect physical space to virtual worlds and how performers can move between material and immaterial spaces. Inspired by the mixed reality choreographic artform UKIYO, Brunel Theatre and Drama are exploring the cross-over between movement, wearable design, interactive performance, acoustics, sound processing and digital imagery to connect audio-visual, kinaesthetic and tactile experiences.

7. Digital Simulation: Brunel engineers and scientists are simulating environments to evaluate the impact that visual cues have on movement and physical activity, and the associated cognitive responses. Sports scientists are exploring decision making for activities such as cycling and football. Engineers are using flight and driving simulators to assess behaviour and ergonomics.

Bikeology looks at the road cycling behaviour of young adults by exploring the relationship between decision-making when cycling. Participants observe first-person video footage of a cyclist navigating and responding to hazards in a busy urban street. We collect cycling performance data and capture gaze data to understand traffic perception and hazard avoidance in urban environments. Our work can be used to inform cycling proficiency instruction practices.

MEDIA SERVICES SUITE

In addition to our research**, Brunel Creative** encourages collaboration between our student community with local businesses and the local community as part of impact and outreach. We support students to take on the role of the creative studio to design and develop digital solutions. We enable external partners to co-create with our experts and using our facilities to explore ideas around creativity and the digital experience.

Brunel Arts organises weekly classes, events, concerts and productions. Our courses and activities are open to members of the public, staff and students. Our facilities support acting, singing, creative writing, digital photography, oil painting, life drawing, pottery, music theory and guitar groups.

Brunel Digital is a student-led group that supports Digital Media. Our work exhibits a strong technological approach combined with an emphasis on creative solutions expressed through digital media. We create stories and deliver digital solutions that bring them to life.

8. Technology Enhanced Learning: Brunel is exploring how social and digital media influences learning outcomes across age groups. We look at how people and society engage with multimedia systems, and the impact of digital on how we interact and communicate. Our work looks at the role of Artificial Intelligence in apps, serious gaming and web-based learning.

Studio Brunel is Brunel University London's theatre company. Led by students, the company caters to a range of creative disciplines within an environment that reflects the professional standard of the arts industry.

Investigate Tudors is a learning resource designed to teach students notetaking skills. It puts the player in the position of a spy at Hampton Court in Tudor times, where they need to take notes and summarise what they see and hear efficiently in order to progress. Developed through student-led design in collaboration with our Academic Skills team, the game uses game-based learning principles to help students develop the necessary study skills.

Octopus 8 is a multi-platform games development and publishing studio. Founded on the principle of fairness to all, the company mentors and nurtures Brunel Games Design talent, supporting students to produce and publish their work.