JACK BROOKES

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PROFILE

Graduate of Mechanical Engineering and now Perceptual Science PhD candidate interested in fundamental human science and bleeding-edge tech. I'm a multidisciplinary problem solver and virtual reality enthusiast with a unique and broad skillset.

SKILLS

- Solid experience developing with Unity and C#, including creating developer tools.
- Experience using Python, R, MATLAB & LabVIEW for scientific purposes including creating GUI tools.
- Familiarity with technologies (HTML/CSS/JS).
- Deep understanding of and experience using all major immersive technology hardware and software.
- Experience with cloud computing technology (Amazon web services)
- User of git and GitHub.
- Excellent mathematics and logical reasoning abilities.
- Understanding of machine learning principles.

EDUCATION

>> UNIVERSITY OF LEEDS: 2012 - 2016
BEng + MEng Mechanical Engineering with a focus on control algorithms for robotic systems, computational solving methods, and systems integration.

>> UNIVERSITY OF LEEDS: 2016 - 2020
PhD Psychology with a focus on human perception, action and cognition. I have been a champion of the use of virtual reality technologies to enhance the effectiveness, applicability and reproducibility of the study of human behaviour. My area of study is the delicate interaction between high-level human decision making and low-level human movement in the context of learning.

WORK

>> UNIVERSITY OF LEEDS: SUMMER 2014
Research Intern, my project was to design a GUI toolkit that helps researchers create their own "haptic force field" experiments at a high level.

>> KEY ENGINEERING SOLUTIONS: 2015-2016
Research & development engineer working on a proof-of-concept automated livestock feeder. I particularly focused on the touch-screen enabled graphical user interface, the backend database, and the feeding data collection mechanisms.

>> UNIVERSITY OF LEEDS: SUMMER 2016
Research Intern, my project involved creating a testing suite to benchmark and safety test robotic rehabilitation devices.

>> UNIVERSITY OF LEEDS: 2016 - PRESENT
Lab Teaching Assistant teaching and marking within the "Computers in Engineering" module in the Mechanical Engineering and Mechatronics programmes at the university.

>> UNIVERSITY OF LEEDS: Q1 2017
Research Assistant role working on a project extracting EEG readings in real time and feeding the data back to the user as a useful metric they can use to improve their performance in a virtual reality sports environment.

AWARDS

National Instruments global student design competition winner (2016)

PERSONAL INTERESTS

- Science & technology
- Graphic design
- Game design
- PC gaming & hardware
- Hobbyist software/electronics (Raspberry Pi)
- Animal photography
- Quizzing