

Job Description

Position / Job Title:	Postdoctoral Research Assistant (for modelling and 3D printing of mobile phone attachments) (Part-Time or Full-Time) (Fixed-Term)
Ref:	FST432/ POSN102020
Faculty/Professional Service:	Faculty of Science & Technology
Group/Section:	Design & Technology
Duration if temporary:	12 months full-time or 24 months part-time
Normal hours per week:	37 (Some flexibility will be required in order to ensure that key time scales and deadlines are met).
Grade:	6
Accountable to:	Professor of Medical Robotics

Job Purpose

In the context of Bournemouth University 2025 vision and strategy centred on Health & Wellbeing and Digital & Technological Futures, applications are invited for a Post-doctoral Research Assistant to work on an NIHR funded innovation project. The post-holder will be expected to develop a mobile phone-based app for neuropathy assessment.

- To undertake directed research activity as part of a research team and under the direction of a senior researcher or Principal Investigator.
- To consolidate work and records, produced by others within the project(s).
- To contribute to the delivery of a project by providing research, project management coordination and administrative support.
- Plan, design and conduct research using recognised approaches, methodologies and techniques within the research area.

Main Responsibilities

The post holder will undertake research and technical development of mobile phone-based apps that can be customised for user friendly interface that patients can use themselves for neuropathy assessment. The post holder will be responsible for investigating the vibration characteristics of mobile phones and develop a generic program that can automatically calibrate different phone to provide consistent readings. This will require good programming skills, app development ability across different platforms (Android, iOS).

The postholder will also be responsible for developing the technical part of the project and liaising with clinicians and project/business partners across the team and to be involved in project management and dissemination of findings. The post holder will be expected to have relevant experience in app development/software engineering with excellent programming skills. Experience of working in a multi-disciplinary team with experimental aptitude would be an added advantage. Experience in health-related projects would also be desirable.

- Work within a team and effectively support the technical development of the project
- Develop mobile phone based apps (Android, iOS) and customise for user friendly interface.
- Design and test apps functionality using standard methodology.
- Attend research meetings and project management meetings.
- Disseminate research findings through public engagements and joint publications.
- Assist the management of the project and communicate effectively with project team and partner organisations.
- Liaise with project partners across hospitals and industrial partners .
- Work with stakeholders from the Healthcare sector and user community.
- Comply with General Data Protection Regulation, Research Governance and guidelines.
- Contribute to the design and delivery of education activities in related subject areas.
- Supervise under/postgraduate students' projects, fieldwork, lab work, placements as appropriate.
- To produce published outputs.
- To manage and coordinate one or more research projects as directed by the Principal Investigator.
- Deliver research objectives of proposed work within the timeframes of the project(s) and ensuring the achievement of project outcomes.
- Ensure the maintenance of data and records in accordance with the appropriate protocol(s).
- Write up research work for publication, to include research outputs and reports.
- Present findings at national/international conferences and other dissemination and knowledge exchange activities, including public engagement.
- Ensure the development of best practice guidelines and the design and delivery of education and/or professional practice activities in related subject areas.
- Identify opportunities and prepare proposals for research grant funding.
- Lead team meetings and committees as appropriate, and provide support and guidance to other staff as appropriate.
- Continue to develop a body of published work and/or artefacts relevant to own discipline both in terms of type and volume.
- Build relationships with internal and external contacts to exchange information, publish outputs, develop future collaborations and identify potential sources of research funding / opportunities to collaborate.
- Undertake personal and professional development activities in line with agreed appraisal and development programme to enhance personal knowledge and contribution to relevant activities.

Organisation Chart

The successful candidate will contribute to the activities of the Department of Design and Engineering, Faculty of Science and Technology.

Professor Keith Phalp (Executive Dean of Science & Technology) -> **Professor Venky Dubey** (Project Principal Investigator/ Manager, Department of Design and Engineering) -> **Research Assistant** (Post Holder)

Information Governance Responsibilities

Data User

- Comply with the associated data protection, information security, information management and information technology regulations, policies, processes and procedures.

Additional Information

NB:

The purpose of the job description is to indicate the general level of responsibility and location of the position. The duties may vary from time to time without changing their general character or level of responsibility.

BU is an equal opportunities employer which values a diverse workforce. The post holder must at all times carry out their responsibilities with due regard to the University's Dignity, Diversity and Equality Policy Statement.

Our highly skilled and creative workforce is comprised of individuals drawn from a broad cross section of the globe, and who reflect a variety of backgrounds, talents, perspectives and experiences to build our global learning community. Through fused activity, the post holder must have an understanding of and commitment to promoting a global outlook.

All employees have an obligation to be aware of the University's Sustainability Policy, Climate and Ecological Crisis Action Plan, Travel Plan and associated documents, and to ensure that they carry out their day-to-day activities in an environmentally responsible manner and inspire students to do the same.

July 2021



Person Specification

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Faculty / Service: Science & Technology

Date: July 2021

SELECTION CRITERIA	Essential / Desirable
Knowledge (including experience & qualifications)	
Degree (PhD/Masters) or equivalent in Engineering, Computer Science or other relevant area	E
Excellent programming skills particularly app development experience	E
Technical/experimental experience in any engineering disciplines	D
Excellent knowledge of iOS and Android based programming	D
Excellent knowledge of web development	D
Experience in healthcare medical device development projects	D
Evidence of a sound publication trajectory	E
Familiar with current developments in research and scholarship with ability to identify appropriate research options, methods and theoretical perspectives.	E
Skills	
Excellent programming skills in C/C++ or C# or python or java	E
Knowledge of experimental calibration of devices	D
Experience of writing high quality reports	D
Experience of presenting research within and beyond academia	D
Experience in collaboration with researchers from other disciplines	D
Expertise in relevant data analytical tools	E
Able to keep accurate records	E
Strong administrative skills	E
Analytical skills	E
Attributes	
Motivated and enthusiastic	E
Good attention to detail and high standards in all aspects of work	E
Ability to work independently and within a multidisciplinary team	E
Ability to work effectively with a wide range of colleagues	E
Ability to multi-task and prioritise different task demands	E
Excellent communication skills, both orally and in writing, and the ability to communicate research findings to different audiences	E
Ability to reason accurately and quickly and handle complex situations	E