1   Advertisement

Post Title: Technical Specialist – Research Web Developer/Programmer
School/department: School of Psychology – Technical Services
Hours: 37.5 full-time, and job shares will be considered up to a maximum of 1 FTE
Core working hours are 8:30am – 5pm, with expectation to work flexibly depending on business need and be on call in case of emergencies or call outs.
Contract: Permanent
Reference: 10363
Salary: starting at £36,333 to £43,155 per annum, pro rata if part time
Placed on: 03 April 2023
Closing date: 18 April 2023. Applications must be received by midnight of the closing date.
Expected Interview date: To be Confirmed
Expected start date: ASAP

This is an exciting opportunity for a skilled and motivated Research Web Developer/Programmer to contribute to the advancement of psychology research. The main responsibilities of this role include creating and maintaining web and mobile software projects using a variety of technologies, providing consulting on software practices and design, collaborating with research staff to improve existing software, and providing training and mentorship to research staff on software development.

As a Research Web Developer/Programmer, you will be responsible for creating web and mobile applications that support the research efforts of various psychology research groups. You will work closely with research staff to understand their requirements and develop software solutions that are robust, maintainable, and effective. Additionally, you will provide consulting on software practices, design, and architecture to research groups to help them improve the quality of their software projects.

The ideal candidate for this position will have strong experience in web development and programming, and/or in the programming of psychology experiments. They should also have experience working with research groups and a deep understanding of software development project management. Additionally, the ability to rapidly learn new research contexts and the ability to train and communicate effectively with research staff are key skills for this role.

This role offers a dynamic and challenging opportunity for a Research Web Developer/Programmer to contribute to psychology research and gain experience in a research-oriented environment. If you are a highly motivated, experienced, and hard-working individual, this may be the perfect opportunity for you to advance your career.

Please contact James Alvarez j.alvarez@sussex.ac.uk for informal enquiries

"*Please note that this position may be subject to ATAS clearance if you require visa sponsorship.*"

For full details and how to apply see our vacancies page

The University of Sussex believes that the diversity of its staff and student community is fundamental to creative thinking, pedagogic innovation, intellectual challenge, and our

interdisciplinary approach to research and learning. We celebrate and promote diversity, equality and inclusion amongst our staff and students. As such, we welcome applications from all, regardless of personal characteristics or background. All roles are open to flexible work arrangements as part of the university's commitment to be flexible by default. Applications for a job share are welcome and would be considered fully for this role.

2.   The School / Division

Psychology at Sussex combines cutting-edge, discovery-oriented research and strong engagement with policy-makers in health and social care, non-governmental organisations and the private sector. In this way we tackle contemporary challenges in mental and physical health, social inclusion and well-being. Psychology at Sussex ranked 18th out of 93 in REF 2021, with 50% of research recognised as world-leading and a further 38% recognised as internationally excellent. Detailed information about the School is available at www.sussex.ac.uk/psychology.

Our flagship undergraduate programme is the BSc in Psychology, which takes more than 500 students per annum. We also offer a number of major/minor degree programmes via the University's pathway system. In order to expand, diversify, and secure the excellence of our undergraduate body, we launched a highly successful Foundation Year in 2016. Indeed, the central Foundation Year team were awarded a Collaborative Award for Teaching Excellence in 2019. We also recruit students to a number of high-quality postgraduate taught courses, and we have a vibrant community of doctoral students.

The School of Psychology has four research groups with a total of over 80 teaching faculty and a large number of PhD students. The research groups are:

•   *Developmental and Clinical Psychology*: the core objective of the group is to translate research in human development to clinical, policy and public contexts. The group's work includes cognitive development, behaviour genetics, socio-emotional development, developmental and experimental psychopathology, and research on mental health in a variety of clinical and community settings.

•   *Social and Applied Psychology*: the group focuses on group and intergroup processes, identity processes, culture, well-being and health psychology. It uses a range of methodologies in laboratory and field settings, with a focus on applied relevance.

•   *Behavioural and Clinical Neuroscience*: the research interests of this group include addictions, aging/dementia, affect/emotion, learning/memory, reward/motivation, decision making. The group conducts non-human animal, human and clinical research, emphasising translational links.

•   *Cognitive Psychology*: the group has broad interests in language and communication, learning, memory, attention, perception, problem-solving and consciousness, with approaches that range from classic experimental psychology through to cutting-edge cognitive neuroscience techniques.

These research groups are the primary vehicles for the exchange of new research ideas, the development and informal peer review of new grant applications and articles, and the mentoring and appraisal of staff. Typically, groups meet fortnightly to discuss forthcoming conference presentations, ideas for new projects and work-in-progress. All grant applications are reviewed by senior colleagues to increase their quality and likely success rates.

All research and teaching faculty have one primary research-group affiliation. However, consistent with the interdisciplinary and collaborative ethos of the School, in practice many actively participate in more than one grouping. Indeed, the five Strategic Focus Areas of research within the School span across these groups: 1) Neuroscience, 2) Mental Health, 3) Sensory Systems, 4) Applied Behavioural Science, and 5) Psychological Methods. We are also in the process of finalising a sixth Strategic Focus Area relating to 'Changing Societies'.

The quality of our research is evident from outputs in premier journals across neuroscience and medicine, through experimental psychology to social psychology, while also encompassing quantitative-behaviour genetics and developmental psychopathology. Reflecting their international prominence in their respective fields, researchers in these four groups published over 1300 peer-reviewed journal articles and received over 40 national and international prizes and eminent recognitions,winning research grants and consultancies to a value in excess of £19m over the census period for REF 2021.

Cross-School and cross-university research centres facilitate interactions between these research groups and with other researchers in the University. Such centres are established to nurture new research activity, build more effectively on areas of academic strength and enhance the vitality of our research environment. They run research colloquia and facilitate shared access to important research populations (e.g. clinical samples, children and young people, participants in disasters and emergencies) and major items of equipment. Centres in which members of the School of Psychology play a prominent role include the following:

• *Centre for Innovation and Research in Childhood and Youth (CIRCY):* based in the School of Education and Social Work, but with strong links to Psychology.
• *Clinical Imaging Sciences Centre (CISC):* provision of multimodal imaging facilities, including an on-site Siemens 3T MRI scanner, with an emphasis on quantifying the function and structure of the brain*.*
• *Sackler Centre for Consciousness Science*: a unique interdisciplinary centre spanning informatics, engineering, psychiatry, psychology and cognitive science.
• *Sussex Addiction Research and Intervention Centre (SARIC*): a merger of pre-clinical, clinical, and psychological research in drug addiction to pursue translational projects.
• *Sussex Neuroscience* pursues basic, translational and clinical neuroscience within the context of a vibrant collaborative research culture across Schools and Departments of the University of Sussex. It was established in 2013 following a £3M investment from the University of Sussex to unite neuroscience activities across campus, distributed across four Schools. It organizes various events, provides some advanced technical support, and funds a 4-year PhD program.
• *Sussex Centre for Research on Kindness* brings together an interdisciplinary team of academics and diverse community partners to explore, investigate, and illuminate kindness and its impacts on people and communities.

We work strategically and in close collaboration with the Brighton and Sussex Medical School on many of these research enterprises. In addition, the School has extensive and diverse links in the area of mental health with the Sussex Partnership NHS Foundation Trust, including numerous research collaborations and clinical trials, as well as a portfolio of professional postgraduate courses.

The School has excellent laboratory facilities to support its research. Specialist facilities include:

• *Sussex Child Research Hub*: The hub comprises ten research rooms, including a child-interaction observation unit with one-way mirror, a room with CCTV for videoing child sessions, two rooms for experimental infant techniques with coding facilities, and a

developmental psychophysics and eye-tracking room. The suite also includes multiple waiting and play areas appropriate for infants, toddlers and older children, and tea/coffee facilities for visiting parents.

• *Behavioural Neuroscience laboratories:* sole use of a microscopy and histological suite and two laboratories dedicated to electrophysiological studies in brain slices; shared use of molecular biology laboratories, all of which have seen significant recent investment. We are a major user of the University's animal unit, which comprises breeding, holding and experimental facilities for rodents and includes a surgery equipped with digital stereotaxic equipment for both rats and mice. The behavioural laboratories are equipped for sophisticated operant and observational studies with rats and mice.

• *Clinical Imaging Sciences Centre:* CISC is a research facility that houses 3T and 1.5T MRI Siemens scanners and a PET/CT scanner. CISC is staffed by a full complement of radiographers with on-site medical cover and capacity for experimental medical investigations. Structural, diffusion, neurochemical and functional MRI is supported by ancillary equipment that includes world-leading capacity for integrating functional MRI with multi-axis physiological and neurophysiological measurements. It is also a centre for scanning patients enrolled into Phase II and III interventional treatment trials for neurodegenerative and neuro-inflammatory disorders and, through clinical scanning of patients from memory clinics across Sussex, is building the UK's largest high-quality neuroimaging research dataset of patients at the onset of dementia.

• *Human Psychopharmacology laboratory:* two medical rooms, a wet lab, 12 specialised testing cubicles, Eyelink eye-trackers, and a fully equipped kitchen for the preparation of food for research on human ingestion.

• *Human Psychophysiology and Psychoacoustic laboratories (129 m2)*: six cubicles, two acoustic booths and a reception area. Equipment includes both Neuroscan and EGI rigs for EEG/ERP, a Magstim TMS rig, and three Eyelink II eye-trackers.

• *Vision laboratories:* A suite of six rooms – of which some are designed to exclude all natural light – include specialist equipment for presenting visual stimuli.

• In addition to these dedicated facilities, Psychology also has 85m^2 of new general-facility, bookable lab space, including 11 test cubicles for faculty and student research projects and other research, a meeting-room, waiting area and kitchen facility.

Sustainability in the School of Psychology

We are committed to sustainability, and work proactively to support [university efforts to become one of the greenest universities in the UK](#), following the launch of the [Sussex Sustainability Strategy](#) in summer 2021.

We are embedding sustainability in all our School operations: from teaching provision on environmental psychology and greening our research activity, to the environmental impact of our buildings and facilities and in our working practices, policies and procedures. This is facilitated by the School's Faculty Green Officer, working together with academic and professional services colleagues and students across the School.

For more on our School sustainability commitments, [see our website](#).

3.   Job Description

Job Description for the post of: **Technical Specialist – Research Web Developer/Programmer**

Department: School of Psychology – Technical Services

Section/Unit/School: Psychology

Location: Psychology/Pevensey Building

Grade: 7

Responsible to: Scientific Officer – Senior Web Developer/Programmer

Responsible for: n/a

4.   Person Specification

Role description:

The Technical Specialist – Research Web Developer/Programmer will build and maintain software and provide specialist support for programming and web-development for the research activities being undertaken within the School of Psychology, helping to develop specialised testing tools to assess and collect data for specialised research projects, whilst following University policies and GDPR.

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PRINCIPAL ACCOUNTABILITIES

1.   Create and maintain web and mobile software projects for psychology research using a variety of technologies.
2.   Provide consulting on software practices, techniques, design, and architecture to research groups, helping to build robust and maintainable research software.
3.   Collaborate with research staff to construct and improve existing software used for psychology research.
4.   Rapidly learn the research context to understand the requirements for effective software project planning and delivery
5.   Training and mentorship of research staff in the building of software

KEY RESPONSIBILITIES

1.   Proactively work with internal and external stakeholders, colleagues or students to ensure the effective service delivery, exchange information and provide data to inform decisions as necessary, showing appropriate sensitivity when needed
2.   Engage in University wide initiatives or groups relating to Research software development
3.   Responsible for ensuring adherence with ITS professional standards and policies (including the University's Information Security policy) and thus the University's digital and cybersecurity strategy for equipment in area of responsibility.
4.   Working with Scientific Officer to provide an effective specialist service for creation of bespoke software for research projects.
5.   Offer expert advice and support to members of the research community about the application of computing systems to support their research activities; this includes providing advice and support about using specialised services to run psychology experiments.
6.   Support the configuration, delivery and maintenance of web servers using tool sets appropriate to the specific system environment

7.   Ensure specialist data collection, design and maintenance of databases for research activities in an effective and efficient manner for a large number of remote / network connected participants.

8.   Manage and prioritise incoming job requests and the list of tasks in an efficient and self-directed manner.

9.   Provide detailed technical documentation for other team members on those elements of the software for which they are responsible; ensure that documentation is kept up to date so that the services can be fully supported.

10.   Ensure the implementation of a safe working environment using good working practices, in line with relevant local and legal requirements. Undertake risk, or other safety, assessments and ensure standard operating procedures are in place and being followed to ensure the safety of others.

11.   Instruct, train and supervise academic and junior technical staff and students in procedures, techniques and the use of equipment, systems, operations and techniques, providing an understanding of underlying operational and practical principles.

12.   Install, configure, test, maintain and support specialist web tools for Psychology experiments, working with colleagues and users. This may include research computing systems located within Schools, shared across different research groups, or dedicated to the use of the particular research group.

13.   Analyse performance, and develop and implement plans to improve performance where it is found to be sub-optimal

14.   Analyse use of the service to determine any underlying problem(s) and where appropriate, work with members of the target audience and colleagues to resolve these in a timely fashion, considering the requirements to provide consistent services to the user community.

15.   Contribute to grant applications that require provision of technical information or development of new techniques.

16.   To represent the University at national and international specialist workshops and committees relating to their technical role.

17.   The post-holder will be encouraged to collaborate with staff and students, taking an active role in the conception and delivery of research studies, with a view to shared authorship on publications if appropriate.

18.   To carry out any other duties that are within the employee's skills and abilities whenever reasonably instructed.

19.   This Job Description sets out current duties of the post that may vary from time to time without changing the general character of the post or level of responsibility entailed.

INDICATIVE PERFORMANCE CRITERIA

●   This role has a small budget responsibility.

●   This role has responsibilities for equipment or premises relating to Web Development and Programming support.

●   The post holder reports to the Scientific Officer – Senior Web Developer/Programmer, working under general direction within a clear framework the post holder will manage their own work (and possibly their direct reports) to achieve their agreed objectives. The role holder will play a key role in supporting the Divisional leadership team to achieve the strategic and operational goals of the University, Professional Services & their Division. The post holder is expected to work collaboratively across the University and with key stakeholders to deliver single team working that efficiently and effectively supports the achievement of those goals and objectives.

● Support achievement of the Division's/Unit's/School's compliance with all applicable statutory and regulatory compliance obligations, including (but not limited to): UKVI, Health & Safety, the Prevent Duty, data protection, Competition and Markets Authority requirements and equal opportunities, as appropriate to the grade and role. Additionally, to promote good practice in relation to University policy, procedure and guidance in relation to those compliance matters in respect of students, staff and other relevant parties.

● Balance effectiveness and cost-efficiency in the management of the budgets you are accountable for, demonstrating compliance with Value for Money and Return on Investment principles to support the University's strategic aim to achieve a world-class standard of teaching and research by managing our resources effectively and efficiently

PERSON SPECIFICATION

ESSENTIAL CRITERIA

1. Either a degree level background in computer science or psychological research methods.

2. Practical experience in web/app development, building and debugging software projects. This would include medium-to-high level proficiency in one or more modern programming languages (e.g. Javascript, Kotlin, Swift)

3. The proven ability and desire to learn new web/app programming languages and technologies.

4. Well developed oral and written communication skills with the ability to present technical information in a way that can be understood.

5. Planning and organisational skills, including project management with the ability to delegate to team members where appropriate.

6. Well developed interpersonal skills with the ability to effectively influence in area of expertise, effectively contribute to team working to build and develop working relationships.

7. Analytical skills with the ability to generate effective solutions and make effective decisions

8. Commitment to research excellence

DESIRABLE CRITERIA

1. Demonstrable web/app programming skills across multiple platforms (e.g. HTML, Javascript, Python, PHP).

2. Experience of developing/programming lab-based and web-based experiments for psychology and cognitive neuroscience research (e.g. PsychoPy, jsPsych, JATOS, Qualtrics).

3. Knowledge and experience of psychological research methods and practices.

4.   Knowledge of scripting/programming within statistical applications (e.g. R, Python, SPSS, Stata).

5.   Good understanding of modern client / server architectures and the common protocols used in implementing client / server solutions.

6.   Knowledge of web servers (e.g. Apache, Nginx), databases (MySQL) and programming languages.

7.   Knowledge of the Higher Education sector.

8.   Knowledge of GDPR and data issues with regards to scientific data collection.

9.   Awareness of University Financial Regulations and transparent approach to costing (TRAC) facility costing.