CANDIDATE PACK

Web Developer

School of Applied Management

Westminster Business School

UNIVERSITY OF WESTMINSTER

OUR
UNIVERSITY

Under the inspirational leadership of Professor Peter Bonfield OBE, the University of Westminster is a place where discoveries are made, barriers are broken, diversity is celebrated and where everyone is welcome. Serving more than 21,000 undergraduate, postgraduate, apprentice and executive students, our mission is to transform the lives of young people from all backgrounds. We seek to make the world a more inclusive, sustainable, better and healthier place through our educational, research and knowledge exchange endeavours.

Since our founding in 1838 we have stood out as innovators, committed to tackling social inequalities. In 2021, our University ranked 2nd in England out of more than 100 higher education institutions for social mobility. The ranking - produced by the Institute for Fiscal Studies and the Sutton Trust – compares the number of students from low-income backgrounds at universities, and the extent to which their studies helped them to move up the income ladder. Westminster has the second highest performance among universities in England.

As we focus forward to 2029, we will continue to do so in a way that is true to our progressive, compassionate and responsible values. Our education offer will be more personalised and authentic, giving students from all backgrounds an opportunity of transformative learning, helping them succeed in their studies and professional lives. Our curriculum will be employability-linked, leading to stronger outcomes and helping prepare our graduates for the world of work and for life. Our research and knowledge exchange will enable us to maximise our positive impact on societies in the UK and around the world in an environment where everyone is inspired to succeed. Our priorities of wellbeing, inclusion and sustainable development will help us as we navigate through the challenges and opportunities towards 2029.

OUR
PRIORITIES

The University's 2022-2029 strategy, Being Westminster, sets us apart and builds on our unique history and achievements. In our University, we value social justice, moral conscience, inclusivity and equality, acting positively together to make change for good.

The University of Westminster has three priorities.

WELLBEING

Working and studying together at Westminster as a community of students and colleagues is a big part of our lives – doing so in an environment that places our wellbeing front and centre helps us to be safe and feel safe. We care for the safety, health and wellbeing of those around us as well as ourselves.

INCLUSION

All Westminster, colleagues and students are in a supportive and safe learning and working environment which is equitable, diverse and inclusive, is based on mutual respect and trust, and is a place where harassment and discrimination are not tolerated. As a responsible institution, we strive to ensure and to champion equality. As a progressive institution, we take pride in our diversity. As a compassionate institution, we commit to an inclusive culture that allows students and colleagues to reach their full potential.

SUSTAINABLE DEVELOPMENT

We take inspiration from the 17 United Nations' Sustainable Development Goals (SDGs) in how we drive our actions and activities and governance across our University. As a community, we bring together our collective energies to play our part in addressing the climate crisis and inequalities to enable a more sustainable and socially just world. We are one of the top 20 universities in the world in SDG 5 for providing equal access and supporting the academic progression of women. We are one of the top 25 universities in the world in SDG 10 tackling economic, health based and international inequalities. We are in the top 50 universities in SDG 12 for promoting resource and energy efficiency, having a sustainable infrastructure, and providing access to basic services for all.

OUR OBJECTIVES
2022-2029

Against a backdrop of a changing and challenging higher education environment, the University has recently completed a major review of its objectives and strategy, and has published its commitments for the period 2022-29.

EDUCATION

We will offer personalised and authentic education, underpinned by an inclusive curriculum, to enable all our students, from all backgrounds, to engage in transformative learning and to succeed in their studies and professional lives. We will address global, political, and social challenges through a relevant demand-led and forward-looking portfolio. We will do this by offering authentic teaching, learning and assessment modes which immerse students in the wider-world through live projects, work-based learning and global opportunities. We will invest in our people to enable all teaching colleagues to plan and deliver exceptional learning experiences and professional colleagues to offer exceptional support. Students will be empowered by working in partnership with colleagues and fellow students to shape the Westminster experience. We will develop an integrated physical and digital environment that supports excellent practical, active and collaborative learning for all our students.

RESEARCH AND KNOWLEDGE EXCHANGE

Research and knowledge exchange are fundamental to our commitment to making a positive difference to the world and transforming lives. We are committed to research in four priority areas: Diversity and Inclusion; Health Innovation and Wellbeing; Sustainable Cities and the Urban Environment; Arts, Communication and Culture. Our excellence in research and knowledge exchange will infuse our education endeavour, inspiring and equipping our students as agents of change locally as well as globally. We will continue to grow our community of PhD researchers, ensuring that the Westminster postgraduate research experience remains sector leading and the foundation for great careers. In knowledge exchange we will focus on engagement with government, business and with the public and local community. We will achieve more when we identify shared interests and build partnerships with our communities and collaborate for the public good with a clear civic purpose.

EMPLOYABILITY

We will ensure that all our students benefit from employability-led learning and purposeful engagement with employers, business and industry, to give students from every background the best possible preparation for the world of work and enable the best possible employability outcomes. We will do this through the further extension and embedding of programmes such as work-based and placement learning; the Westminster Employability Award; Westminster Working Cultures; mentoring; and student enterprise. Employability-related learning will be a core and critical part of the courses and curriculum we offer, right across the University. It will be front and centre of life at the

JOB
DESCRIPTION

Job Title: Web Developer
Reports to: Principal Investigator
Department: School of Applied Management
Grade: NG5

ROLE PURPOSE

To support the delivery of a web platform for the Innovate UK funded project – AI- Enabled Design Optimization System for Waste Efficient Project (AI-DOWEP).

PRINCIPAL ACCOUNTABILITIES

- Develop digital workflows and user interfaces for AI-Enabled Design Optimization System for Waste Efficient Project (AI-DOWEP), ensuring efficient integration with BIM data via Autodesk Forge for model access and management.
- Integrate the AI optimization algorithm provided by the industry partner, ensuring its smooth functionality within the platform to deliver accurate waste reduction and design optimization outputs.
- Support Implementation of the platform's reporting capabilities to enable users to generate comprehensive reports on waste optimization outputs, including data-driven recommendations for improving material efficiency.
- Ensure data storage and security protocols are adhered to, managing databases and files in line with data protection standards to maintain secure and accessible user and project data.
- Support internal stakeholders and external partners by providing technical guidance and responding to user queries related to the functionality and operation of the platform.
- Support and maintain technical documentation for workflows and platform usage, ensuring clear guidance for ongoing support, user training, and future development needs.
- Conduct testing and troubleshooting of platform features, identifying and resolving technical issues to ensure reliability and consistent performance.
- Contribute to the enhancement of user experience (UX) by implementing feedback and refining interfaces to deliver a seamless and user-friendly journey for all platform users.
- Assist in outreach activities by developing user support materials, such as tutorials and user guides, to improve the accessibility and understanding of the platform's features.
- Undertake any other duties as appropriate within their competence as required by their Line Manager, contributing to the successful delivery of the AI-DOWEP project.

CONTEXT

The AI-DOWEP (AI-enabled Design Out Waste Efficiency Platform) project is funded by Innovate UK and hosted within the School of Applied Management at the University of Westminster. The project aims to advance sustainable construction practices by leveraging AI-driven optimization algorithms to minimize material waste in building design. By integrating Building Information Modeling (BIM) with cutting-edge AI tools, the platform will provide construction professionals with real-time insights and recommendations for waste reduction, ultimately contributing to more efficient and sustainable construction processes. This role is central to delivering the project's digital infrastructure, supporting the University's mission to drive innovation in digital construction.

The web software developer will focus on platform development ensuring that the AI-DOWEP platform is both user-friendly and technically robust. Responsibilities include developing web interfaces for BIM model uploads, incorporating the optimization algorithm provided by an external AI team, and supporting the development of the reporting functionalities to deliver actionable insights on material efficiency.

This role requires technical skills in web development, attention to data security, and the ability to collaborate with an interdisciplinary team to meet project milestones. Working with the project team, the developer will contribute to the University's strategic goal of promoting sustainable practices in construction. The University requires all post holders to have an understanding of individual health and safety responsibilities and an awareness of the risks in the work environment, together with their potential impact on both individual work and that of others.

DIMENSIONS

The AI-DOWEP project will be based within the School of Applied Management at the University of Westminster. This is a fixed-term role dedicated to delivering the Innovate UK-funded AI-DOWEP platform, with a focus on web development, data integration, and optimization. The web software developer will work offsite and onsite (hybrid) at the University's campus, with the possibility of remote work within the UK, in line with the University's Smart Working policy. The role may require occasional attendance at external meetings with industry partners and stakeholders to ensure the platform meets project goals and user requirements.

The post holder will not have direct budgetary responsibility but may have responsibility for managing specific project resources and associated financial records, as agreed upon with the project lead. The developer will primarily be responsible for technical development tasks and will collaborate with external AI teams and internal stakeholders to integrate the AI optimization algorithm. The role will not involve direct supervisory responsibilities but may require coordination with external partners and the University's IT support services to ensure successful project delivery.

The University requires all post holders to have an understanding of individual health and safety responsibilities and an awareness of the risks in the work environment, together with their potential impact on both individual work

and that of others. The position involves working with various software tools and systems, requiring adherence to digital security and data management protocols. Standard working hours for the web software developer are 9 am to 5 pm, Monday to Friday, although occasional adjustments may be required to accommodate project deadlines or technical support requirements.

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PERSON
SPECIFICATION

QUALIFICATIONS

Essential

- Degree or equivalent level of experience in web development, software engineering, or a related field. Equivalent experience may include hands-on project delivery in full-stack development or digital platform deployment.

Desirable

- Professional certification in web development or a related field, such as Certified Web Developer or similar recognized credentials.

TRAINING AND EXPERIENCE

Essential

- Proven experience in full-stack web development, including front-end and back-end programming languages (e.g., JavaScript, HTML/CSS, Node.js, and databases such as MongoDB or SQL).
- Demonstrable experience in integrating external APIs
- Experience in implementing secure data storage and handling user data with a focus on data protection and compliance.
- Experience with version control systems (e.g. Git) and working in collaborative environments.

Desirable

- Experience in the construction or engineering industry, particularly with projects that involve sustainability and material efficiency.

APTITUDES, ABILITIES AND PERSONAL ATTRIBUTES

Essential

- Strong problem-solving skills and the ability to work independently to address technical challenges and implement innovative solutions.
- Excellent project management abilities, capable of prioritizing tasks and meeting project milestones within tight deadlines.
- Strong communication skills to work effectively with external partners, particularly in integrating the AI team and industry partner.
- Ability to document technical processes and create user guides for both technical and non-technical audiences.
- Motivated with a commitment to sustainable practices and digital innovation
- Flexible and creative approach to work and a willingness to undertake a complex variety of tasks.
- Fully committed to contributing to a stimulating learning and working environment which is supportive and fair, based on mutual respect and trust, and in

which harassment and discrimination are neither tolerated nor acceptable.

Desirable
- Skills in data visualization and reporting tools, with experience creating user-friendly visual outputs for technical and non-technical users.

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HOW TO APPLY

To apply for this vacancy, please visit our **vacancies page** where you will be able to download our application form template. You will then be requested to complete a quick registration before being able to upload completed application form and any supporting documentation.

Applications should include:
- A concise statement in support (ideally no longer than two pages), addressing the criteria in the Person Specification and motivation for applying.
- You may also include an up to date curriculum vitae;
- names and contact details of two referees (although referees will only be approached at offer stage).

The deadline for receipt of applications is midnight on 28 January 2025.

Interviews will take place on week commencing 03 February 2025.

An appointment will be made subject to proof of eligibility to work in the UK and satisfactory references being obtained.

At the University of Westminster, diversity, inclusion and equality of opportunity are at the core of how we engage with students, colleagues, applicants, visitors and all our stakeholders.

We are fully committed to enabling a supportive and safe learning and working environment which is equitable, diverse and inclusive, is based on mutual respect and trust, and in which harassment and discrimination are neither tolerated nor acceptable.
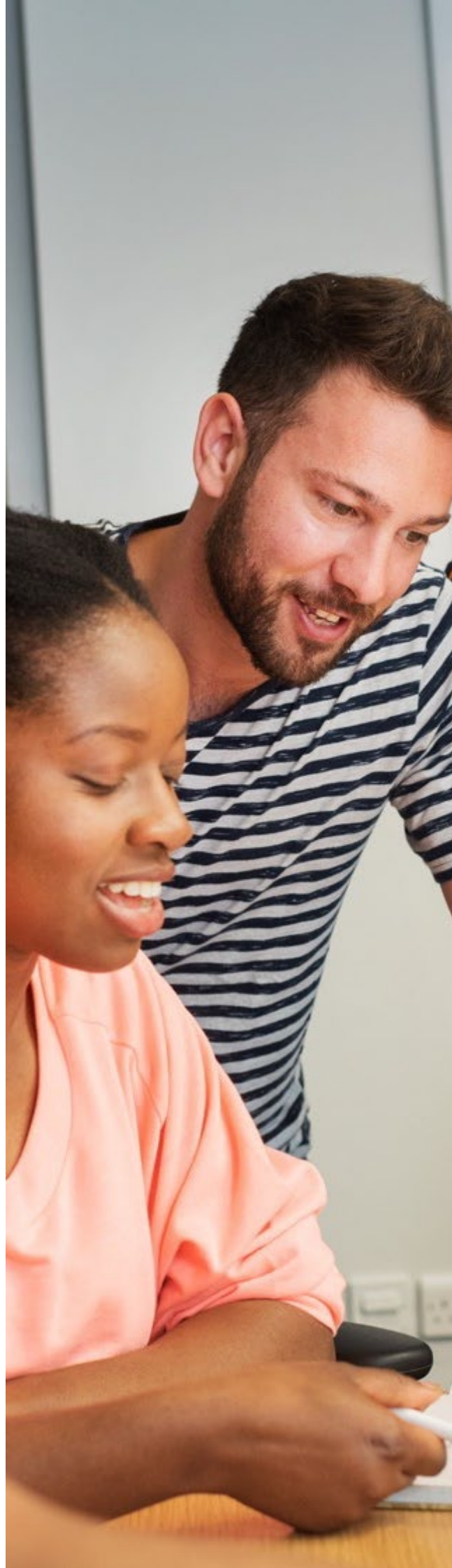
The University has adopted Smart Working principles to support and further our Equality, Diversity and Inclusion aims of being an inclusive, collaborative and flexible employer. Further details of Smart Working can be discussed at interview stage.

OUR
BENEFITS

The University offers a range of wellbeing and work-life balance benefits to recognise and reward the essential contribution our colleagues make to success and growth. Our benefits are inclusive for colleagues of all backgrounds including LGBTQ+ colleagues, disabled colleagues, pregnant colleagues, parents and carers, as well as colleagues of all genders, age, ethnicities, nationalities, religion and beliefs, and marriage and civil partnership status.

- 35 days annual leave per year, plus bank/national holidays and University of Westminster closure days (pro-rata for part-time staff).
- A generous occupational pension scheme.
- Annual incremental progression and/or cost of living reviews.
- Generous maternity, paternity and adoption leave.
- Flexible working and smart working.
- Learning and development opportunities.
- Free membership rates for a wide range of sporting facilities, including gyms at Regent Street and Harrow campuses, as well as the Chiswick Sports Ground.
- Employee assistance programme.
- The opportunity to participate in other attractive employee benefit schemes such as Cycle to Work, Eye Care Vouchers, Season Ticket Loans, and Give As You Earn.

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