

**Job Title:** Design Automation Developer

**Reports to:** Digital Design Lead

**Eckersley O'Callaghan** is one of the most innovative engineering design firms in the world, with a global reputation cultivated through a commitment to research and creative thinking. We enjoy working with a range of materials, forms and building types across diverse sectors and project scales to deliver imaginative solutions. Our multiple award-winning collaborations with forward-thinking architects such as Foster + Partners, Zaha Hadid Architects and Heatherwick Studio, for clients that include Apple, Google, Vitsoe and Bulgari, have placed us at the forefront of design in structures and facades. Our commitment to sustainability, digital design, and continuous research and development remains at the core of our approach.

We offer a stimulating work environment with enthusiastic, intelligent, hard-working colleagues, and support personal development through training and project opportunities. Our principal office is in London, with other offices in Manchester, Paris, Milan, New York, Los Angeles, San Francisco, Delhi, Hong Kong, Shanghai and Sydney.

### DESCRIPTION

Our growing Digital Design team in London is excited to welcome a **Design Automation Developer** with strong programming skills and a passion for AEC (Architecture, Engineering, and Construction) applications. Whether you're a recent graduate or an experienced professional, this is your opportunity to make a real impact by developing innovative and meaningful tools to support our engineering teams. You'll contribute to diverse applications spanning facades, structural and advanced materials engineering, access and maintenance, and sustainability. This role offers exciting opportunities for growth, as well as the chance to tackle unique challenges of varying complexity.

Joining us means becoming part of a creative and collaborative engineering environment, where ideas and knowledge are continuously exchanged across disciplines. As a Design Automation Developer, you'll blend technical expertise with innovation to develop tools that drive sustainable, efficient, and inspiring engineering designs. Whether creating brand-new tools or refining and enhancing existing ones, you'll use your programming skills to streamline workflows and deliver technically robust solutions. If you're ready to innovate, explore, and make a meaningful impact on the future of engineering design, we'd love to hear from you.

### JOB KNOWLEDGE, SKILLS AND EXPERIENCE

- A strong degree, certification or equivalent in STEM (Computer Science, Engineering, Architecture) or software development in AEC
- Demonstrated experience in Software Development Life Cycle (SDLC) - understanding of software development methodologies, including agile practices, version control, and testing.
- Experience with full-stack development (both front-end and back-end development)
- Experience with collaborative tools (like version control systems) or cloud platforms
- Experience with development of extensions for design and parametric platforms such as Rhinoceros and Grasshopper, Revit and Dynamo APIs
- Experience with machine learning or applied artificial intelligence techniques such as supervised/unsupervised learning, deep learning, neural networks
- Familiarity with key algorithms for sampling, shuffling, sorting, clustering, searching, graph theory
- Familiarity with optimisation techniques such as genetic algorithms, multi-objective optimisation
- Familiarity with data analysis and visualisation algorithmic techniques: translate complex datasets into comprehensible visualisations
- Ability to collaborate and communicate effectively with computational designers and engineers to understand requirements and workflows
- Strong communication and presentation skills in English
- Ideally some experience with architectural geometry (knowledge of differential geometry is a plus)
- Ideally some experience with knowledge dissemination and programming teaching
- Some knowledge of Computational Design methods and workflows would be preferable

## KEY RESPONSIBILITIES

- Report directly to the Digital Design Lead in London
- Build projects that enable collaboration and contributions from other team members
- Review and revise code contributions to ensure quality assurance and support team skill development
- Contribute to R&D initiatives to drive innovation in design automation and engineering tools. Collaborate with computational designers and engineers and work as part of the team
- Collaborate with computational designers and engineers to develop robust, practical solutions as part of an integrated team.
- Apply theoretical knowledge to practical scenarios in a logical and methodical manner.
- Identify potential issues early and proactively develop solutions to address them.
- Assist in automating presentations, reports, and other deliverables to improve efficiency and accuracy.
- Prioritise workload effectively to meet tight deadlines while maintaining high standards.
- Work efficiently both independently and within a collaborative team environment.

## PERSONAL QUALITIES

- Team-oriented mindset
- Positive attitude and willingness to learn from practice applications and teach programming methods
- Great organisational skills
- A flexible, positive approach and the ability to work as part of a team in a busy, creative atmosphere
- Excellent interpersonal skills with the ability to communicate with people of all levels

## WE OFFER

- A stimulating work environment with a smart, diverse and motivated set of colleagues
- A competitive benefits package
- Volunteer and outreach opportunities
- Flexible working around core hours
- Opportunities for continuing professional development including mentoring to charterhip
- Training opportunities
- Opportunities for career growth
- Opportunities to take part in internal R&D activities
- Collaboration opportunities with our international offices
- World-class projects with leading architects and collaborators

**Please email your CV, samples of work and covering letter with subject line 'EOC-IN-COM' to:**  
[recruitment@eocengineers.com](mailto:recruitment@eocengineers.com)