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Senior Consultant - Mechatronics Engineer

Reports to: Technical Director

Location: London

Summary

Exceptional user experience and robust mechanical performance sit at the core of every project at PDD. Whether within the healthcare space, where a patient with a chronic disease relies on the electromechanical functionality of our product to deliver their therapy and improve their quality of life. Or within consumer electronics, where the feel and function of mechanisms and interactions act as the physical embodiment of a company's brand values. Many of the most exciting and complex challenges lie at the interface between mechanics, electronics and software.

Leveraging your creativity, expertise and enthusiasm for design, engineering, electronics and software you will work with our teams to develop technically challenging and innovative products from early ideas to production. After suitable development and support from our team you might also manage PDD projects, taking responsibility for commercial success and client relationships alongside the quality of technical design.

Key Responsibilities & Accountabilities

- Create inventive, appropriate and practical technical concepts and assess feasibility
- Research, source and specify applicable technologies, suppliers, materials and processes
- Develop concepts into reliable and robust solutions via; 3D CAD modelling, math models, python programming, C/C++/Arduino coding for MCUs and FEA/CFD simulation
- Manage the creation of electromechanical prototypes for testing
- · Detail and specify design for manufacture; including engineering drawings, tolerances and specifications
- · Create and control documents including presentations, reports and schedules
- Communicate and present work to clients
- Operate within the PDD quality system and wider regulatory framework
- · Manage project time and cost, lead and co-ordinate the team and liaise with clients and subcontractors

Requirements

We are looking for a talented and dynamic Engineer with the technical, communication and management qualities to ensure innovative solutions, successful projects and ongoing client relations.

Minimum requirements include:

- 1st or 2:1 Bachelors Degree in Mechatronics (or similar)
- 6+ years of experience in a relevant field developing electromechanical systems
- Fundamental knowledge of electronics including: power systems, switching systems, FETs, Noise etc.
- Confident programming with Python and C/C++/Arduino
- Basic working knowledge of PCB schematic design and layout (for prototypes)
- Proficient in CAD (Solidworks)
- Experience with engineering analysis tools (FEA/CFD) and tolerance analysis
- Familiar with materials and processes including moulding, casting, machining and fabrication
- Excellent written and verbal presentation skills

Ideally you also have experience in the following areas:

- System level design including electronics and software integration
- Projects with significant quality & regulatory requirements

Filename: PDD Job Specification Senior Consultant - Mechatronics Engineer London 150724.docx

PDD

PDD is a design and innovation consultancy creating physical and digital products and experiences that drive our client businesses and delight their customers and users. We have been winning awards and serving our long-standing clients since 1980.

With studios in London, Shanghai and Hopkinton MA, and working in 6 continents, our experienced managers and talented researchers, designers and engineers help companies in the Medical & Healthcare, Consumer and Industrial & Commercial sectors to grow their businesses through innovation.

We ensure that product and experience solutions are successful by ensuring they are appealing to customers, are feasible and viable for clients to make and are responsible given regulation, society and the environment. Such success creates our future- and it's this sustainable 'win-all-round' business model that excites us- we call it 'Meaningful Innovation'.

We are committed to a workplace environment that promotes diversity across all our studios and this applies to the talent we hire, the customers we work with and the people we interact with on our projects. We offer competitive compensation, a range of excellent benefits and opportunities for international travel. Working with us also opens up new networking opportunities and a chance to engage with colleagues at social events.

To apply for this position, please email <u>techcareers@pddinnovation.com</u> with a cover letter, your CV and portfolio, if applicable.

We look forward to hearing from you.

PDD Talent Management