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| **Person Specification** | **Senior CFD Developer** |
| **Rank 7** |
| experience | Deep knowledge of Computational Fluid Dynamics principles including high-quality mesh generation, discretisation schemes, and solution methods for incompressible and multiphase flows with specialized knowledge in either or all: - Particle-laden flows, including Eulerian-Eulerian and Eulerian-Lagrangian methods - Fluid/wave-structure interaction (FSI/WSI) with application to marine engineering or closely related industries |
|  | Extensive experience of utilising HPC facilities for performing large scale CFD simulations and postprocessing large datasets. |
|  | Extensive experience in CFD code development within in-house or open-source frameworks is required. Direct experience with OpenFOAM is highly desirable. |
|  | Significant Experience in one or more of the following:  - Multiphysics and coupled simulations including partitioned simulation techniques.  - Multiphase flows such as segregated flows with interfaces and/or dispersed flows with particles. |
|  | Some project management experience with the planning, management and delivery of technically challenging and complex projects on time, to the required quality, and on budget. |
| communication skills | Ability to support discussion on clients’ technical problems; contribute to proposed solutions; and communicate complex technical themes in an easy-to-understand manner. |
| communication skills | Ability to write clear technical proposals and reports. |
| individual skills | Strong attention to quality and detail. |
|  | Good time management when handling multiple technically challenging tasks. |
|  | Ability to take technical and commercial ownership of allocated tasks. |
| team skills | Experience of working closely with other members of the Engineering Team to help find optimised and balanced solutions. |
|  | Experience to take the initiative, find solutions and proactively drive progress. |
| qualifications | An MSc with at least 5 years of experience with a focus on CFD/Computational modelling. A PhD with 2 or more years of postdoctoral experience is highly desirable. |
|  | Chartered status or active progress toward becoming Chartered, along with professional membership in a relevant body (e.g., Institution of Civil Engineers), is highly desirable |