

CFD/MARINE ENGINEER – Developer & Analyst – Junior

Full Time Position

Reference : **C&H_JOB_19_03_CFD**
Publication Date : 2019-08-01
Activities : CFD – Hydrodynamics - R&D – Yacht, appendages and propulsion design
Education Level : Master or PhD
Duration : Full Time Job
Seniority : Junior (less than 6 years of experience in the field)
Start date : September/October 2019
Location : Valencia, Spain
Answer to : **jobs@caponnetto-hueber.com**

1. Caponnetto-Hueber Presentation

Background:

Caponnetto-Hueber is a leader in naval architecture solutions, innovative concepts and fluid dynamics services in the maritime world focusing on the racing, sailing, flying and mega- yachts.

Caponnetto-Hueber main topics of expertise are hydrodynamics, aerodynamics, shapes optimization and numerical simulations (CFD i.e. Computational Fluid Dynamics).

Caponnetto-Hueber has been involved with America's Cup for more than 2 decades and has won it several times.

Services:

Caponnetto-Hueber provides innovative services in fluid dynamics, using high-end methodologies and tools for naval architects, yacht designers, shipyards and ship owners to improve design, performances and efficiency, to lower consumptions and emissions.

- Innovative Concepts
- Design
- Naval Architecture
- Foiling Yachts
- Computational Fluid Dynamics (CFD)
- Hydrodynamics
- Aerodynamics

Main current projects:

- Innovative concepts and solutions
- Flying electric boat design and flight control
- Mega-yachts hydrodynamics and CFD
- Propellers design and hydrodynamics
- Racing and cruising sailing yachts hydrodynamics and CFD
- America's Cup (36th AC)
- R&D

The design office is located within the Marina of Valencia, Spain.

The company is currently expanding its workforce of 8 persons and is willing to integrate motivated and hardworking professionals who want to work in a competitive, high-technological and international sector.

2. Collaborator Profile

Profile:

- CFD/Marine Engineer with a Master or a PhD in one of the following fields:
 - o Computational Fluid Dynamics
 - o Hydrodynamics / Aerodynamics
 - o Naval Architecture / Yacht Design
 - o Or equivalent

Experience:

- Less than 6 years of experience:
 - o using a CFD RANS software to study motor-yachts, sailing-yachts or ships
 - o developing and writing codes and programs
 - o designing or analyzing hulls, appendages or propellers

Job Description:

- You will prepare and run CFD cases, analyze the results and write comprehensive reports to help and guide the clients to improve their design or objectives (**CFD**).
- You will use your technical, analytical and coding skills to develop or improve in-house methodologies, tools and codes (**Development**).
- You will use and develop your creativity and engineer skills to develop, design and validate new concepts and innovative solutions (**Design**).
- You will be working in full autonomy on various yacht projects from motor yachts to foiling crafts and study their hydrodynamics/aerodynamics behavior and characteristics using CFD.
- You will be working on various yacht projects from motor yachts to foiling crafts and study their hydrodynamics/aerodynamics behavior and characteristics using CFD under the supervision of a senior engineer.
- Once you have developed and proven your technical, analytical and reporting skills, you will take responsibility of your projects and work in autonomy.

Technical Requirements ("MUST"):

- Deep knowledge of Fluid Dynamics
- Proficient with Star-CCM+ or with Open-Foam for naval applications.
- Proficient in programming and automatization using Python, Java and shell scripting
- Knowledge of optimization methods and codes

Technical Skills Appreciated ("PLUS"):

- Knowledge of motor yachts and propulsion design
- Knowledge of foils and flying boats design
- Knowledge of structure and especially fluid structure interactions
- Good knowledge in CAD (Rhinceros and Grasshopper)
- Knowledge of HPC

Other Requirements ("MUST"):

- English is compulsory as it is the working language at the office.
- **Rigorous, hard-worker, to maintain the quality standard of the group.**
- Curious, passionate, eager to learn and to push your knowledge.
- Humble and able to work within an international team.
- Open-minded with the ability to adapt to innovate.
- Eager to apply hard sciences to the naval industry.

Contact us at jobs@caponnetto-hueber.com using the offer reference in the title and include your CV and references in English will be highly appreciated.