

## **MATHEMATICIAN – DATA SCIENTIST – PROGRAMMER**

### **Full Time Position**

**Reference** : **C&H\_JOB\_19\_08\_SC**  
Publication Date : 2019-11-15  
Activities : CFD – Hydrodynamics - R&D – Yacht, appendages and propulsion design  
Education Level : Master or PhD  
Duration : Full Time Job  
Seniority : More than 4 years of experience.  
Start date : February 2020  
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 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 (36<sup>th</sup> AC)
- R&D

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

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

## 2. Collaborator Profile

In order to develop new design and analysis tools, the company is looking for multi-physics scientist with a strong background in Mathematics who is eager to apply computer sciences to the nautical and naval industry.

### Description:

- You will improve, develop and integrate new tools, fluid dynamics codes, optimization algorithms and programs, performance prediction tools and methods, data viewer and data management tools (**Production**).
- You will report directly to the Technical Director and assist him on implementing the R&D strategy (**Development**).
- You will be in charge of the quality, the standards, the testing, the versioning and deployment of the different tools and programs (**Quality Control**).
- You will be coordinating the different development projects which are done internally or sub-contracted (**Coordination**).

### Profile:

- Master or PhD in one of the following fields:
  - o Mathematics, Computer / Data Science, Engineering
  - o or a field relevant to the job duties mentioned.

### Experience:

- More than 4 years after Master with a minimum of 2 years of experience in the industry is necessary.
- It is not compulsory to have experience in the field of the naval architecture, marine industry nor in the fluid dynamics, but it would be a PLUS.

### Qualifications:

- Numerical methods
- Optimization methods
- Programming
- Scripting
- Big Data
- Neural network training
- Machine Learning

### Technical Requirements ("MUST"):

- Java or C++
- Python
- Shell Scripting
- Database and Data Manipulation Language.

### Technical Skills Appreciated ("PLUS"):

- IT
- HPC
- Simulation Engineering
- Graphics and Data visualization
- Web Dev and JavaScript
- Git Management

### 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.**

- Autonomous and responsible to be fully in charge of your own projects.
- 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.
- Willing to deliver and manage projects in a timely manner.

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.