

Charles Dhainaut - Naval Engineer

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I am a naval engineer specializing in hydrodynamics for race yacht design. My work revolves around employing numerical simulations, optimization techniques, data analysis, and machine learning methods to enhance the efficiency of high-performance sailboats.

Skills

- Yacht Hydrodynamics
- Numerical Simulation
- CFD Analysis (StarCCM+, OpenFOAM)
- Data Analysis
- Machine Learning
- Python, Java, Linux, CAD (Rhino3d, Catia)

Work Experience

Freelance Yacht Hydrodynamics Engineer, Self-Employed, (*Aug 2019 - Present*)

- Analyzing hydrodynamics for race yachts.
- Developing tools for design optimization.
- Conducting numerical simulations.

Simulation & VPP Engineer, Beyou Racing, Lorient, France (*Feb 2020 - Jan 2022*)

- Simulating IMOCA 60 dynamics using Gomboc.
- Performing pre/post-processing and data analysis.

CFD Engineer, Cape Horn Engineering, Portsmouth, UK (*Dec 2018 - Jun 2019*)

- Conducting CFD studies for resistance and seakeeping.
- Developing post-processing tools and macros.

R&D Engineer, D3 Applied Technologies, Santiago de Compostela, Spain (*Mar - Aug 2018*)

- Performing CFD studies and foil design.
- Utilizing VPP with FS Equilibrium.
- Developing analysis and optimization tools.

Naval Engineer, ENATA Shipyard, Dubai, UAE (*May - Oct 2017*)

- Designing composite parts for foiler project.
- Industrializing kitefoil mast and glider systems.

Hydrodynamicist, DCNS Lorient, France (*Dec 2016 - May 2017*)

- Calculating ship resistance, aerodynamics, and seakeeping.
- Creating appendage drawings for rudders and fins.

Education and Qualifications

M.S. in Naval Engineering, Hydrodynamics Specialization, ENSTA Bretagne, (*2013-2016*)

Machine Learning MOOC, Stanford University, Coursera (*2019*)