



Dear Sir/Madam,

Roberto has been a researcher in our lab (FLOW Lab at U.C. Berkeley) for ten months. Even though his main field of study is aerodynamics, he quickly adapted to the multiphase flow environment and has greatly contributed to some of our topics.

He has been able to experimentally and theoretically study the stability of air layers over superhydrophobic surfaces, key in our drag reduction research in marine vehicles. The main objective of his work is to understand the turbulent boundary layer pounding in the air-water interphase. He is creatively studying it by making an analogy between the interphase and an elastic membrane model, driven by turbulent pressure fluctuations he obtained from a collaboration with the Melbourne University group led by Ivan Marusic.

Experimentally, he has successfully designed and built a simple yet effective experiment to study water impact dynamics in varied water-repellent surfaces. After solving noise and sensor inaccuracies, he got an interesting batch of data which is being currently analysed. I would like to highlight at this point his intuitive physical understanding, thanks to which we are gaining a fruitful insight into the water impact dynamics.

On a personal level, I enjoyed the productive discussions we had. He has been a fantastic addition to our human team, and has bonded greatly with his lab colleagues, giving a hand whenever it was needed.

I believe he has delivered in a demanding, world-class university, which makes me think he is more than capable of contributing to your goals. I would no doubt recommend Roberto for the position available. Please do not hesitate to contact me if any further question arises.

Best Regards

Prof. Simo Mäkiharju