

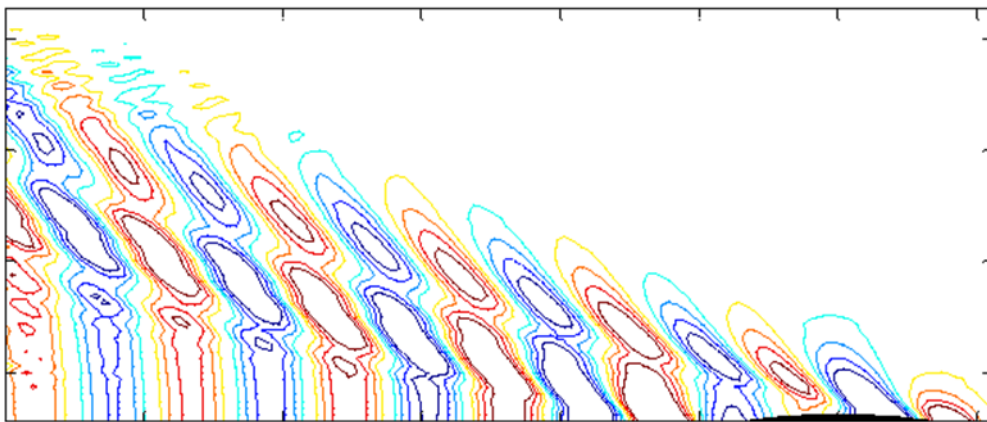
## Naval architecture in the second largest shipping nation in the world

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Mirjam Fürth, [m.furth@soton.ac.uk](mailto:m.furth@soton.ac.uk) (feel free to email me if you have any questions)

I was very fortunate to receive the Postdoctoral Short Term fellowship and I have spent 12 months in Japan at Yokohama National University with Professor Makoto Arai in the Department of System Design for Ocean-Space, Faculty of Engineering.

My research field is computational fluid dynamics. I work with improving and developing methods to calculate the flow field around a ship. This is of great importance since the resistance of the ship depends large on how the water moves along the ship. A reduction in resistance can save considerably on fuel costs. A reduction in the usage of fossil fuels is also a great importance to the environment.



Wave patten behind a ship

My main reason for coming to Japan was that it is a very large shipping nation with the second largest merchant fleet in the world. Because of the size of the fleet and the existence of excellent shipyards, Japanese companies tend to work with other Japanese companies. To tap in to this vast amount of knowledge, one has to come to Japan. The Department of System Design for Ocean-Space at Yokohama National University has a towing tank for model experiments and a great knowledge of numerical modelling.

My advice to future scholars are: if you stay longer, study Japanese. This has opened up the society to me and I have learned so much about Japanese culture. I also joined "Meet up" which is an excellent way of finding friends outside of the university. Japanese people are very open and friendly so I find it very easy to make friends here. In Japan rules are very important and sometimes plentiful. The good thing is that once you figure them out, they do in most cases make life easier. I would recommend bring lots of small gifts from your country, gift giving is very important. In Japan I attended several conferences to get to know academics and industry representatives.



I attended kimono and yukata wearing classes, here I am together with my kimono teacher Tomomi and Dome a fellow student from my Japanese class

Finally I would like to thank all the members of my lab, for helping with everything, for discussing how to improve my own and their research and for making my time here very memorable as well as the staff at Yokohama National University for sharing all their knowledge with me.



Members of my lab at Prof. Arai's yearly BBQ, Prof. and Mrs Arai are to the far left and my partner and I are to the far right

If you are reading this I guess it is because you are thinking about coming to Japan. All I can say is "Do it". Coming here has been a great experience and being a JSPS fellow has made it possible for me to land a faculty position at Stevens Institute of Technology, USA.