Yaolin Ge

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Stockholm, March 7, 2020

Yogesh Girdhar
ARPLab, WHOI

Guest Students in "next generation of autonomous robots"

This is Yaolin GE, a final year master student from the major of Maritime Engineering at NTNU-KTH, expected to graduate by Jun 2020, a creative and enthusiastic mariner who really enjoys making a difference in the exploration robots as WHOI ARPLab does, making deep sea observable and explorable. My background so far has been quite interdisciplinary, spanning the border of classical marine engineering to underwater robotics, and the potential to continue this sort of inspiring exploration is what first attracted me to pursue this guest student position, with its diversity of field in versatile systems, will allow me to learn from people at the top of this exciting field. This eye-opening experience will enable me to pursue my research interests to a much greater depth while also expanding my future career opportunities within the autonomous robotics field. It is also worth mentioning that joining a community of other like-minded individuals will be a valuable chance for collaboration and personal development. I believe that I am a highly motivated student and also a well-qualified applicant.

Robotic perception and deep-sea exploration will play an important role in the future of the understanding of our ocean. The ARPLab attracts me to engage even more via learning and using advanced technologies to enhance the ability to tour our sea.

As a result of the strong interest in exploring autonomous robotics and underwater perception, I urged myself to learn more under an advanced study environment, for which I then pursued my dual-degree master's study within Marine Technology at NTNU-KTH. The interdisciplinary study and research environment rewarded me a lot in terms of practical skills and personal growth. I together with the other 11 people designed and manufactured a self-autonomous sailing boat here at KTH SMaRC, in which I was the steering guy who took the entire steering system to an upgraded level to achieve the self-autonomous sailing and active steering capabilities. Thankfully, those experiences enhanced my ability to a deeper level to utilize engineering methods to solve practical problems. I feel much more confident about my practical skills. At present, I am conducting my master's degree project within underwater signal processing system for the underwater navigation system which has an emphasis on underwater detection, localization and tracking objectives.

With this wide range of experiences, I have gradually developed a liking taste in the autonomous marine field. I develop motivation from the level of responsibility and independence required of a graduate student and relish the opportunity to prove myself at this level.

To sum up, I expect to contribute to the industry and society with my professional knowledge and practical skills obtained from this guest student program. With full confidence in me as well as the professional training you provide in the program, I believe that my plan will be realized any time soon. Thank you very much for your time and consideration.

Applicant: *Yaolin Ge*