

**IGS Scholar's Name: SUN HAOQI**

**Research Centre: ERI@N**

**1. Your current employment details (Designation, name of company, country and scope of work)**

Project officer, Fraunhofer IDM @ NTU, Singapore, manage projects and continue doing research. I will be going to Massachusetts General Hospital, USA, for post-doc research fellow.

**2. What motivates or trigger you to pursue a doctorate?**

I like the feeling of being a researcher in academia: free, inspiring, and able to pursue interests.

**3. Why or how did you decide to apply to IGS or the interdisciplinary route of research?**

The interdisciplinary research is becoming wide-spreading in recent years. For example, computational approaches are applied in new fields, like medicine, which highly improves the efficiency and reliability of new methods. As a researcher, it is important to understand and adapt to these changes.

**4. What is your thesis about?**

My thesis is interdisciplinary. It is about using computational method (machine learning) to recognize the attention status from brain waves during doing tasks, like driving. With these new methods, automated driving system can take your attention information, paving the way to safer automated driving and personalized services.

**5. Why did you choose this topic and how does it benefit people or industries globally or internationally?**

This topic combines machine learning and computational neuroscience, both of which I'm interested in since high school. The methods developed in this thesis can be applied to extract the attention status from people, so that it becomes an additional data source. Under the context of Internet of Things, this data source can be fed to multiple assistance systems which enhances the quality of life.

**6. What kind of interaction did you have in IGS? How did that help you?**

I attended many seminars, where I can meet people in and outside IGS. These different kinds of seminars help me in many ways, including the way of thinking, communication, and self-evaluation.

**7. What are the challenges you faced during the candidature and how did you overcome it?**

The most difficult part is learning new theories when there is no people around you who knows it. I kept reading textbooks and papers but still being confused. These challenges can be overcome by constantly being involved in discussion with other people. They may not know much about the theory. However, new ideas or breakthroughs did come when something inspired me during discussion.

**8. What was your proudest moment or fondest memories over the years of candidature? E.g awards, overseas conference, patent, published papers, etc.**

The best memory is actually after spending 2 months reading a huge 800-page textbook, and found myself being able to teach others. I kept telling this to colleagues in similar fields.

**9. What do you think are the attributes for PhD students to successfully go through the 4 years?**

Think carefully and never give up. It is very easy to give up in the 4 years,

**10. Please share 1 key motivational/ key take away message with your juniors?**

Read the textbooks. Don't be afraid of how many pages.

**11. How does it feel like when you received the scholarship offer?**

I feel I'm excited by the challenges in the coming 4 years.

**12. Share with us some memorable photos you've taken with 1 line description of each photo. (e.g. Overseas conference, interactions in IGS, etc)**



Attending the banquet in the ELM conference organized by my supervisor Prof Huang Guang-Bin.

**13. What will you miss after graduating?**

I will miss the reading club every Thursday morning. We had great discussion there.

**14. What is your next adventure / challenge or any plans for the future?**

I will become a post-doc researcher, and continue to enjoy research and contribute to science and technology.

**15. Is there anything you want to say to your family, supervisors, mentors, friends or anybody?**

Family: You really support my decisions every time!

Supervisor: Thanks for the strategically insightful supervision!

Co-supervisor: Thanks for the kind and mind-opening discussions!

Girlfriend: Thanks for your warm company and support!