

**IGS Scholar's Name:** Goh Woon Peng

**Research Centre:** Complexity

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

I am still seeking employment, ideally in a data scientist role.

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

Primarily, it was my fondness of creatively solving problems with no obvious answers that drove me to a PhD. I also appreciated the constant opportunities to learn new things (be they theories, algorithms, or technical tools) when one is in a doctorate program.

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

It was through the advice of my supervisor which I came to know about IGS and how it is a potential fit with my area of interest.

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

My thesis dealt with the extraction of structures and patterns from real-world data using methods inspired by network analysis. In it, I presented a diverse range of projects which included the transition network analysis of classroom teaching practices, the unsupervised extraction of syntactic motifs from language networks, and the data-driven characterization of dialogue dynamics during problem-solving tasks.

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

The ubiquity of networks in many systems led me to believe it can be a very widely applied tool in data analysis.

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

The frequent students' seminars exposed me to what are the current state-of-the-art in various fields. Through them I am more aware of the upcoming innovations and technologies.

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

The worst moments of my candidature was when one of my research projects hit a dead end with no obvious paths moving forward. It was eventually overcome when my supervisor and I finally managed to define a new set of scientific problems of to be addressed in the project after many weeks of discussion.

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

Sharing my work in the in the Complexity Sharing Session here and in the Conference on Complex Systems in Amsterdam in 2017 were both memorable in how some members of the audience reacted with genuine interest.

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

The willingness to share and discuss your research (especially when it hits a roadblock!) with your supervisors, colleagues, or others can be very useful.

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

Research is never predictable, aim high, don't be too hard on yourself!

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

I felt very honoured that I was offered a premium scholarship.

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

I will miss the countless hours of productive and not-so-productive discussion with my PhD colleagues.

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

I am preparing to transition away from academic into the industry and trying to kick start a career in data science.

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

I would like to thank my main supervisor Assoc. Prof. Cheong Siew Ann for his relentless optimism in my abilities and research.