

FUNDAMENTALS OF LEARNING AND INFORMATION PROCESSING

SESSION 20: TULIP APPROACH TO RESEARCH (I)



Gang Li

Deakin University, Australia

2024-03-19

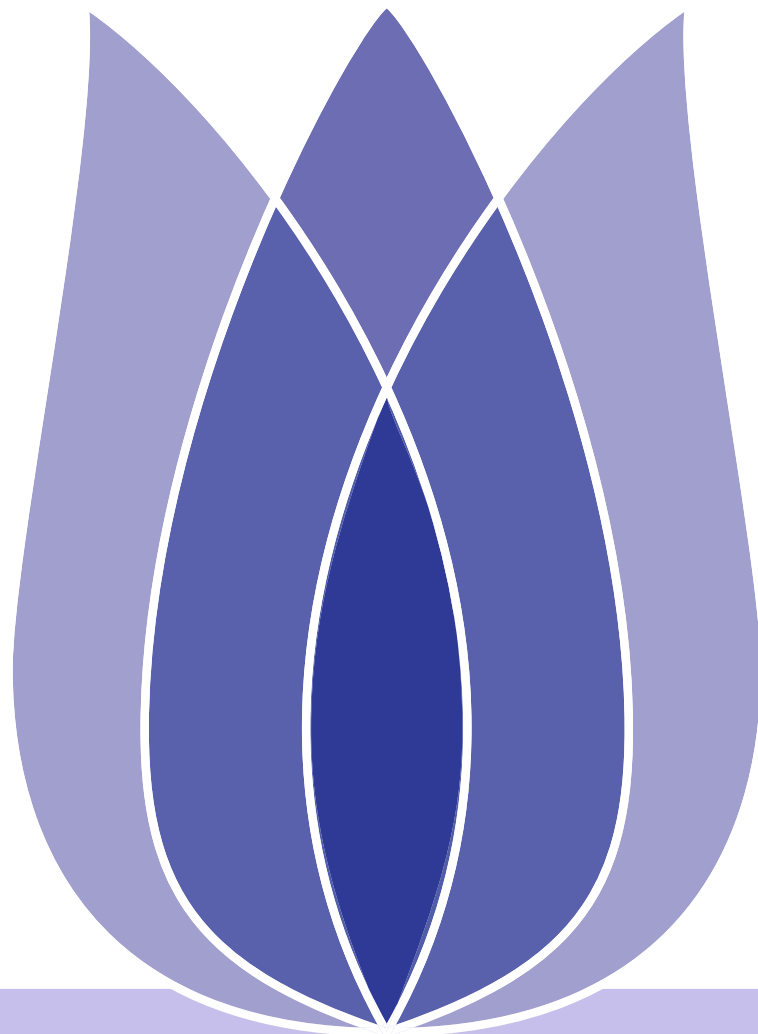




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TULIP Academy

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TULIP Academy

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■ Professor Gang Li

◆ Deakin University

- *University Academic Board Member*
- *University Thesis Examination Committee*
- *Cyber Analytics & AI leader, Deakin CREST*
- *Deputy Director, Deakin D2I*

◆ Academic Services

- IEEE Technical Committee
 - ◆ Task Force on *Educational Data Mining*, (Chair 2020-)
 - ◆ *Data Mining and Big Data Analytics*, (Vice Chair 2017-2019)
 - ◆ *Enterprise Information Systems*
 - ◆ *Enterprise Architecture and Engineering*
- IJCAI, AAAI several times as *Area Chair*
- PAKDD, ACML as *Senior PC*
- KSEM, ATIS as *Steering Committee member*
- DSS, IT&T, TM, JTR, APJTR as *Associate Editor*
- Cyber Security, DSS, JIKM, JIFS, IEEE Access as *Associate Editor*



TULIP

Team for Universal Learning and Intelligent Processing



Among the **top** 1 % of universities worldwide, *Computer Science* ranked the **4th** in Australia

Major Rankings.

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- **#1** university in Australia for *education experience* (*2019 Student Survey*)
- **#1** university in Australia for *careers service*(*Australian Graduate Recruitment Industry Awards*)





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Table 1: Major Rankings of Deakin University

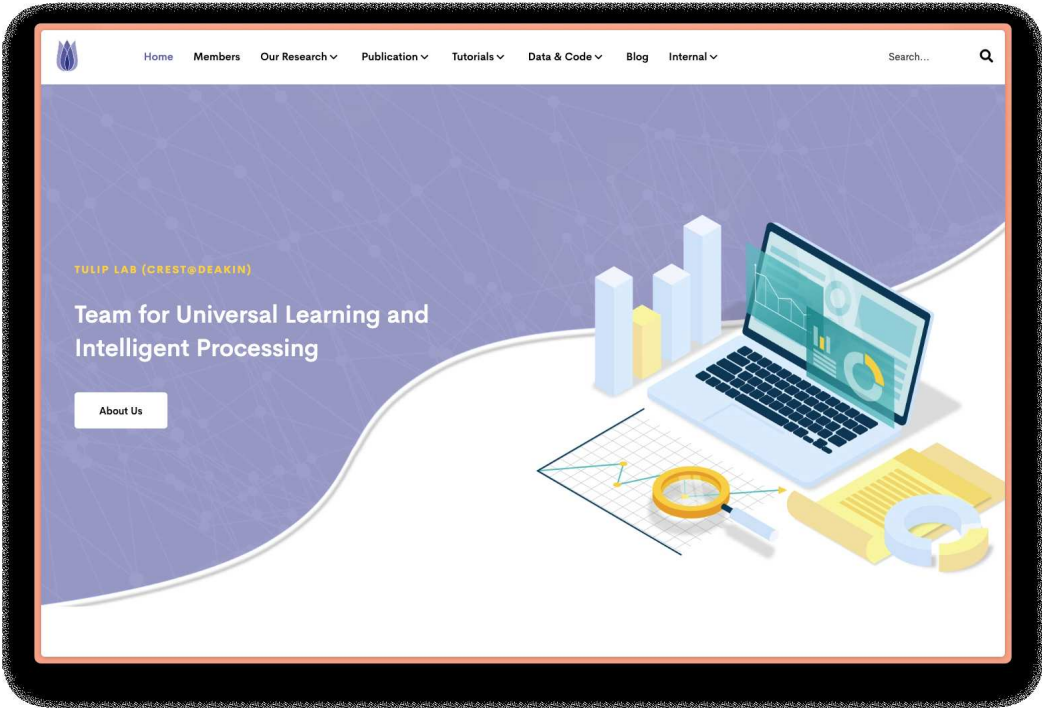
	Benchmark	2014-2015	2015-2016	2016-2017	2017-2018
ARWU	World National	301-400 12-19	201-300 9-14	201-300 11-14	201-300 10-15
CWTS Leiden	World National	284 11	325 17	314 17	226 11
QS#	World National	360 19	324 17	355 19	293 17
THE	World National	301-350 13-15	301-350 18-19	251-300 12-18	301-350 17-21
THE<50	World National	45 6	50 8	43 8	50 8

<https://www.australianuniversities.com.au/rankings/>



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👍 Focus on Intelligent Techniques

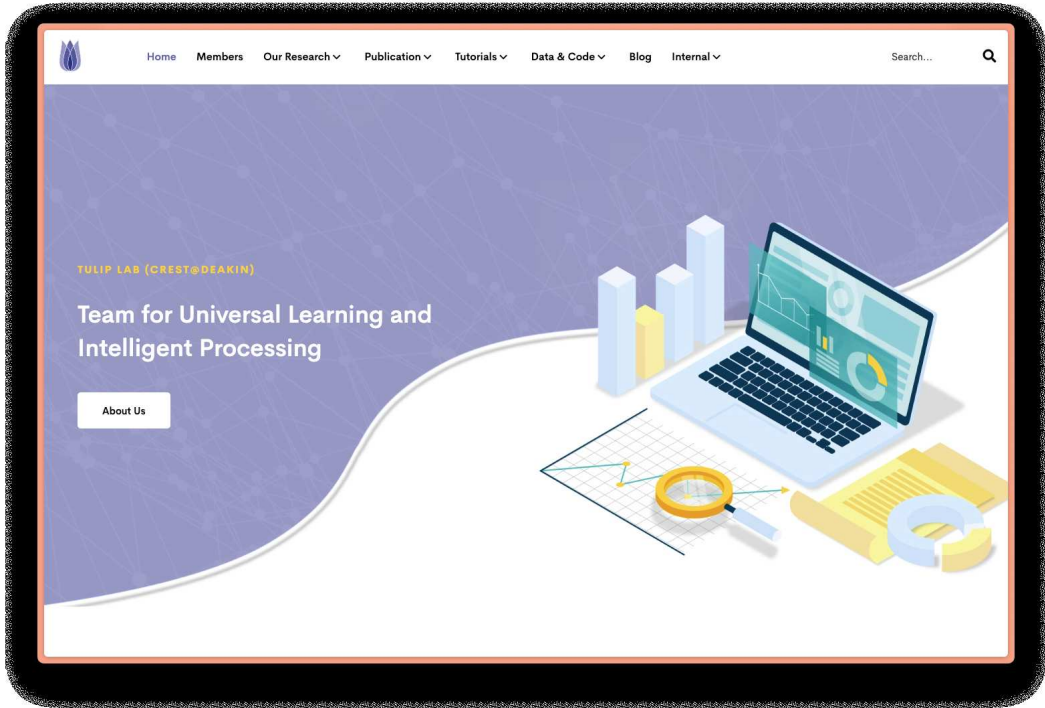
Research Areas.

Artificial Intelligence automate various intelligent tasks using advanced algorithms



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👍 Focus on Intelligent Techniques

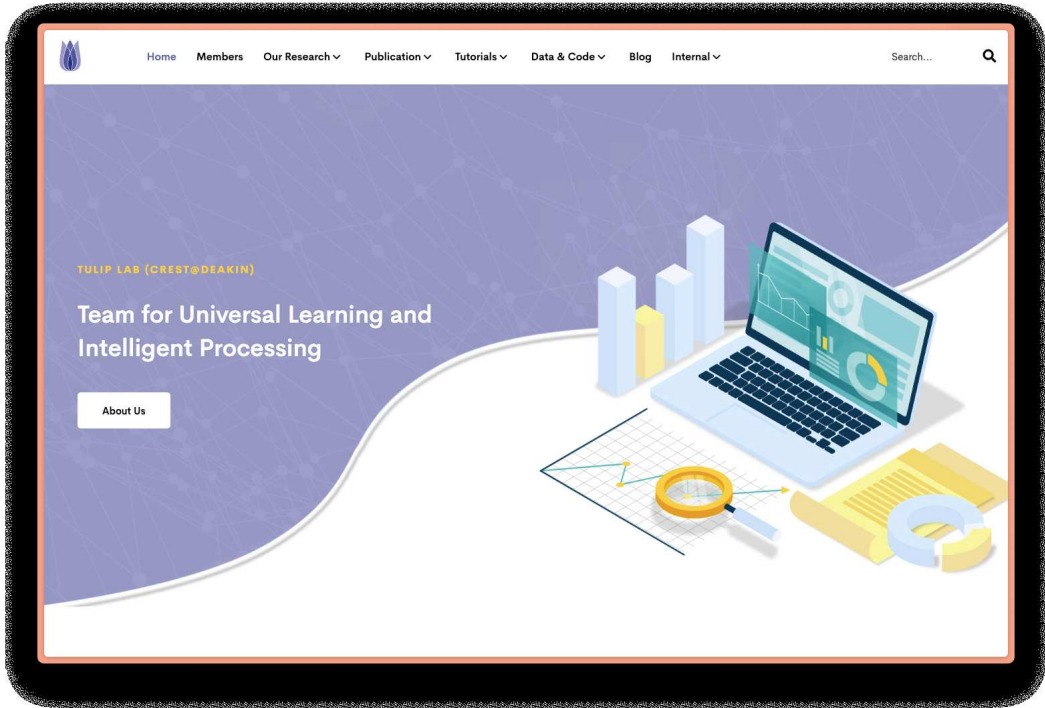
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Artificial Intelligence automate various intelligent tasks using advanced algorithms
Privacy & Security Cyber-security and How to preserve the privacy of individuals while analyzing the data



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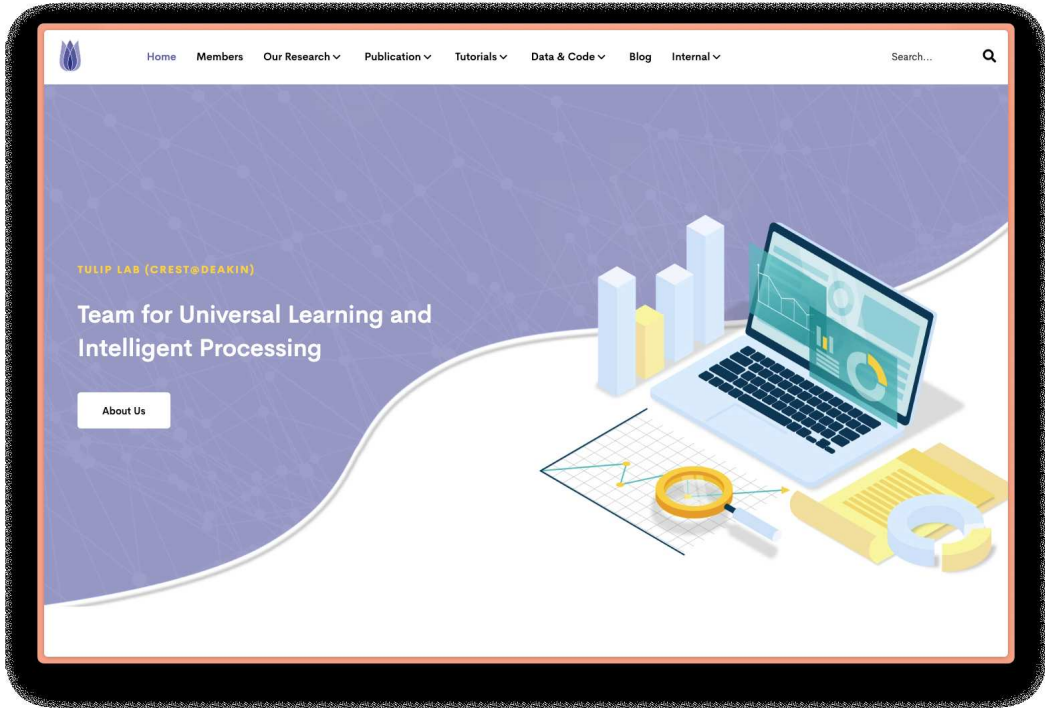
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- Artificial Intelligence** automate various intelligent tasks using advanced algorithms
- Privacy & Security** Cyber-security and How to preserve the privacy of individuals while analyzing the data
- Business Intelligence** support business decision-making using data science and artificial intelligence.



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 Focus on Intelligent Techniques

Research Areas.

Artificial Intelligence automate various intelligent tasks using advanced algorithms
Privacy & Security Cyber-security and How to preserve the privacy of individuals while analyzing the data

Business Intelligence support business decision-making using data science and artificial intelligence.

AI Applications AI and data science applications in various domains





Web Resources

- [TULIP Academy](#)
- [Whom am I?](#)
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Official Websites

- **G:** Google Scholar
- **🏠:** <https://www.tulip.org.au>
- **🐱:** <https://github.com/tulip-lab>

Social Media

- **🐦:** Twitter
- **👤:** Reddit
- **in:** Linkedin



NEXUS Research Training Program

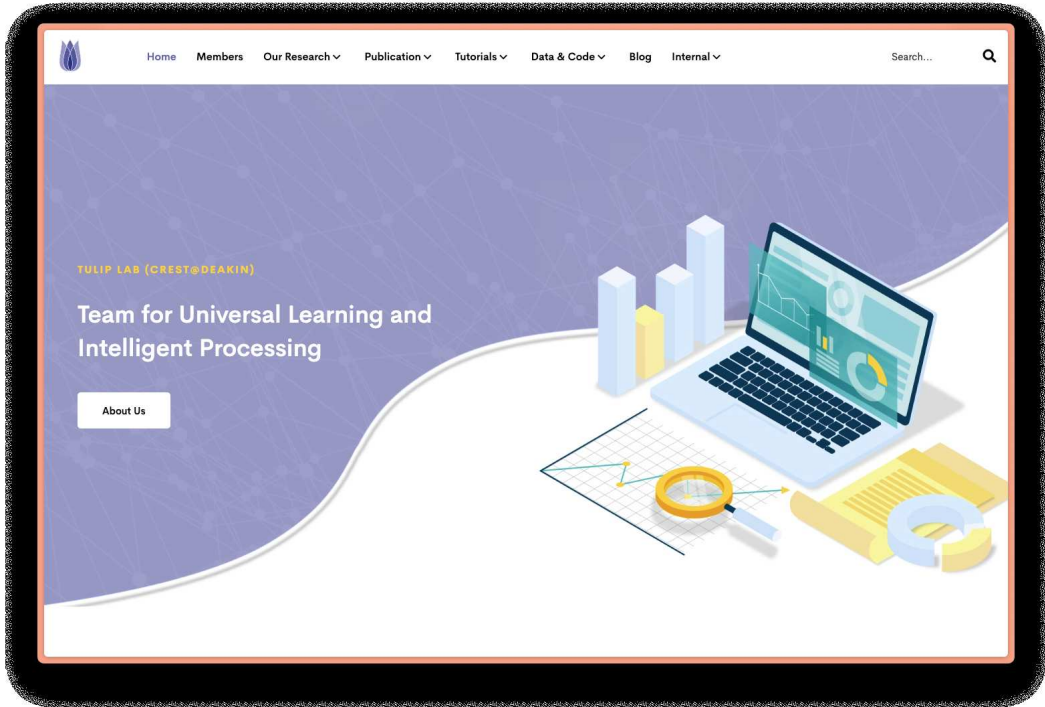


NEXUS Research Training @ TULIP

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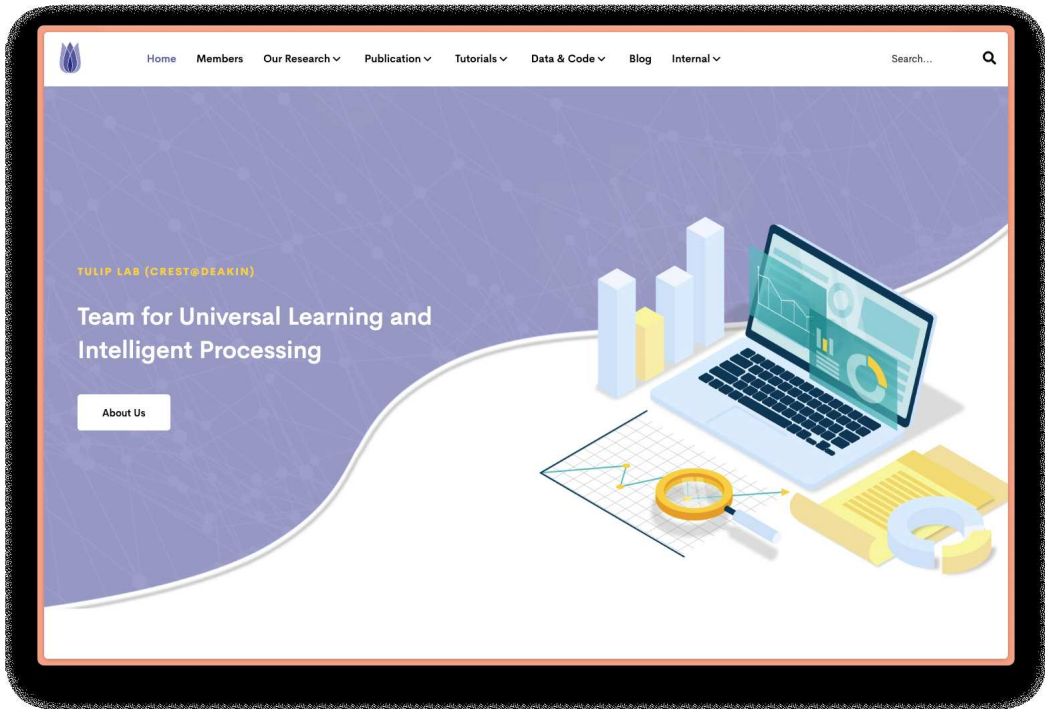
Igniting Innovation, Cultivating Minds: *where Research Excellence Begins*



- The Student Researcher Internship offers more opportunities for students to work on **high impact and critical research projects**.



Igniting Innovation, Cultivating Minds: *where Research Excellence Begins*

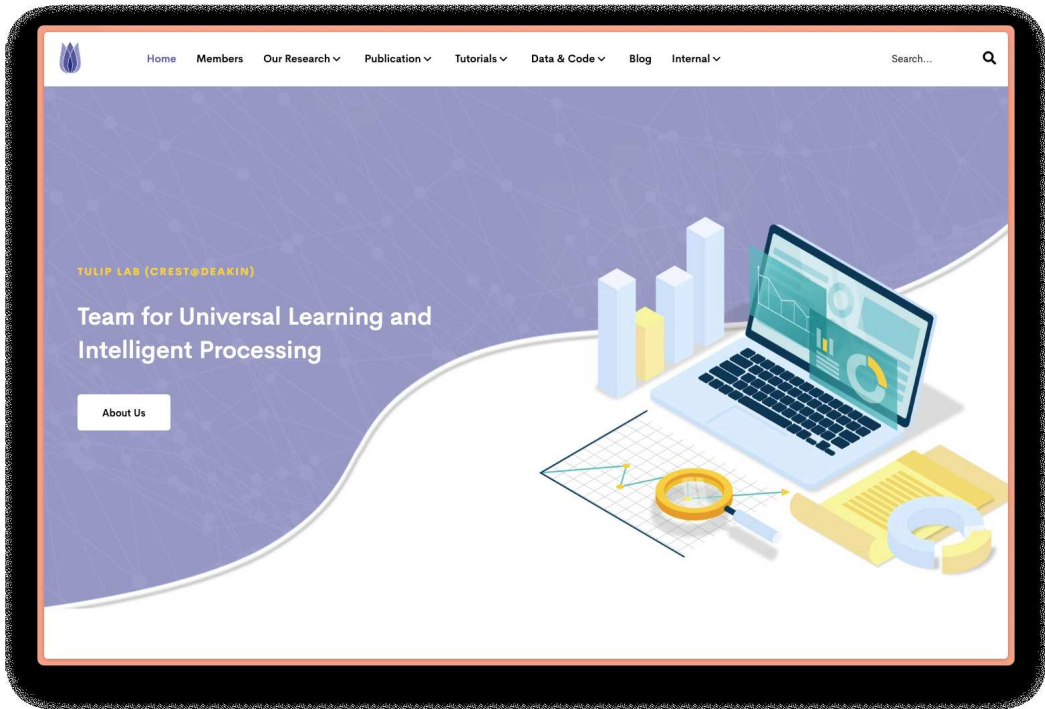


- The Student Researcher Internship offers more opportunities for students to work on **high impact and critical research projects**.
- It allows opportunities **beyond the limitations** of traditional internship program on aspects such as *duration, time commitment, and working location*.





Igniting Innovation, Cultivating Minds: *where Research Excellence Begins*



- The Student Researcher Internship offers more opportunities for students to work on **high impact and critical research projects**.
- It allows opportunities **beyond the limitations** of traditional internship program on aspects such as *duration, time commitment, and working location*.
- You have no obligation to join us after the internship, and we will encourage you to apply for PhD scholarship from world-leading universities.





NEXUS Training Stages





NEXUS Training Stages





NEXUS Training Stages






NEXUS Outstanding Alumni


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University of Pennsylvania (Wharton) is ranked global **No. 3 in Best Business Schools.**




Daniel Gao (He/Him)
Australian Delegate to G20 Youth || Student at the Wharton School




Research Intern under Dr. Gang Li
Deakin Research · Internship
Mar 2021 - Sep 2022 · 1 yr 7 mos
Melbourne, Victoria, Australia

Data-mining and data visualisation for PhD candidates at TULIP-lab




Intern
Anthony Raso & Associates
Jan 2020 - Feb 2020 · 2 mos
Melbourne, Victoria, Australia · On-site





Education








The Wharton School
Finance & Business Economics and Public Policy
Activities and societies: Penn Undergraduate Capital Partners (Project Lead/Sourcing Analyst), Moso Capital (Investment Analyst), Social Impact Consulting (Consultant)

Impact Factor: **5.1** / 5-Year Impact Factor: **4.4**

 Available access | Research article | First published online December 1, 2022

Value creation in wine tourism – an exploration through deep neural networks
[Daniel Gao](#) , [Haiyang Xia](#) , , and [Rob Law](#)  [View all authors and affiliations](#)
[OnlineFirst](#) | <https://doi-org.ezproxy-b.deakin.edu.au/10.1177/13567667221140605>

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Abstract

The aim of this paper is to explore what aspects create experiential value for wine tourists. We synthesize the extant literature into four dimensions for wine tourism value creation, namely, product-related aspects; sensory and affective experiential aspects; cognitive, educational experiential aspects; and social-relational experiential value-creating aspects. So far, most studies merely discuss product-related aspects whilst insights on experiential value are less known. Using online review data from wine tourists in Australia, we develop a novel deep neural network-based framework using an innovative AI-based exploratory design. Results of the case study reveal that in addition to product-related aspects, sensory-and education-related experiential aspects are also highly important for value creation in wine tourism. Theoretical and practical implications, as well as ideas for future research are discussed.



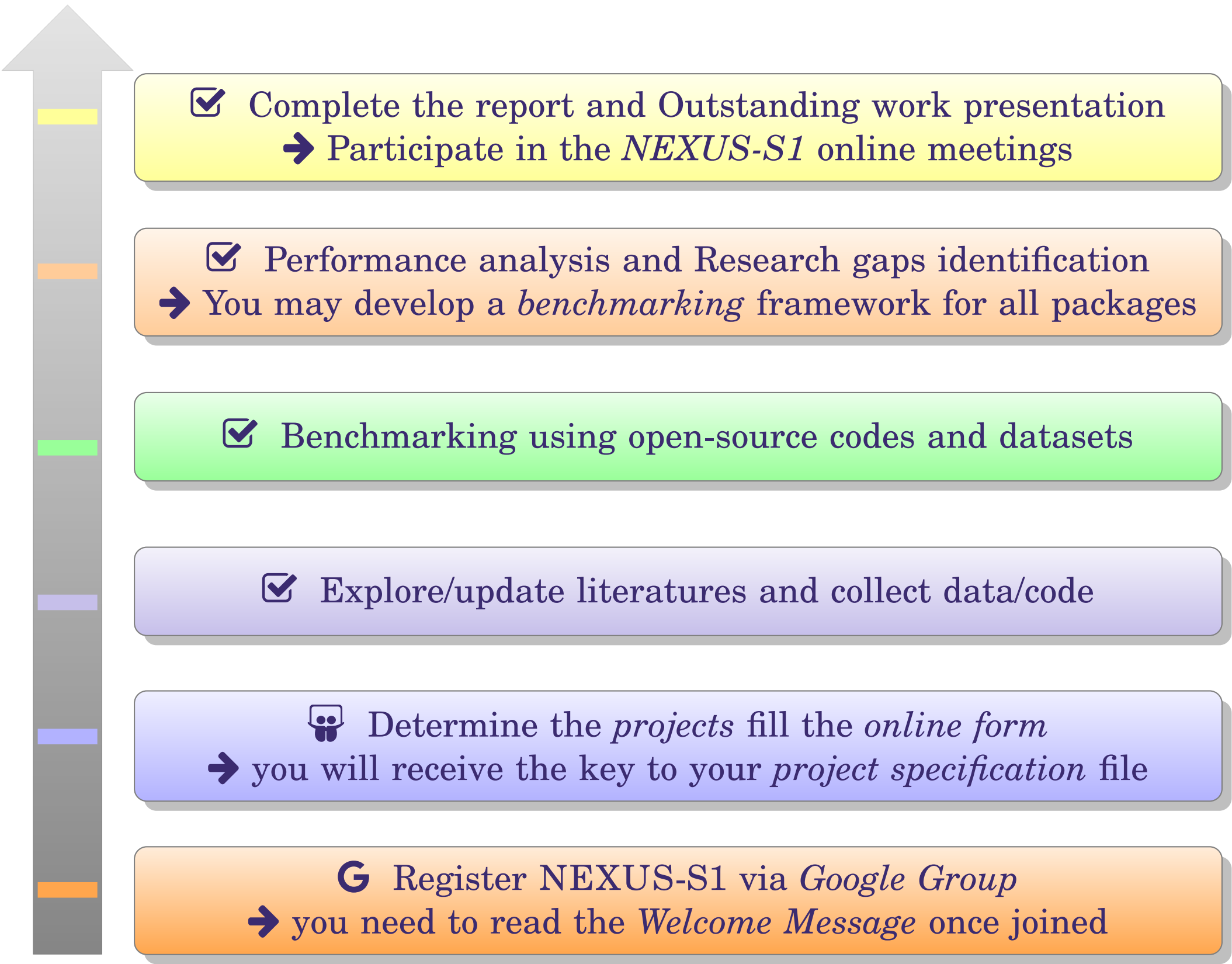
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Starting NEXUS Training



NEXUS-S1 Recommended Timeline


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Repositories

-  TULIP-LAB Resources
-  TULIP-LAB Open-Projects

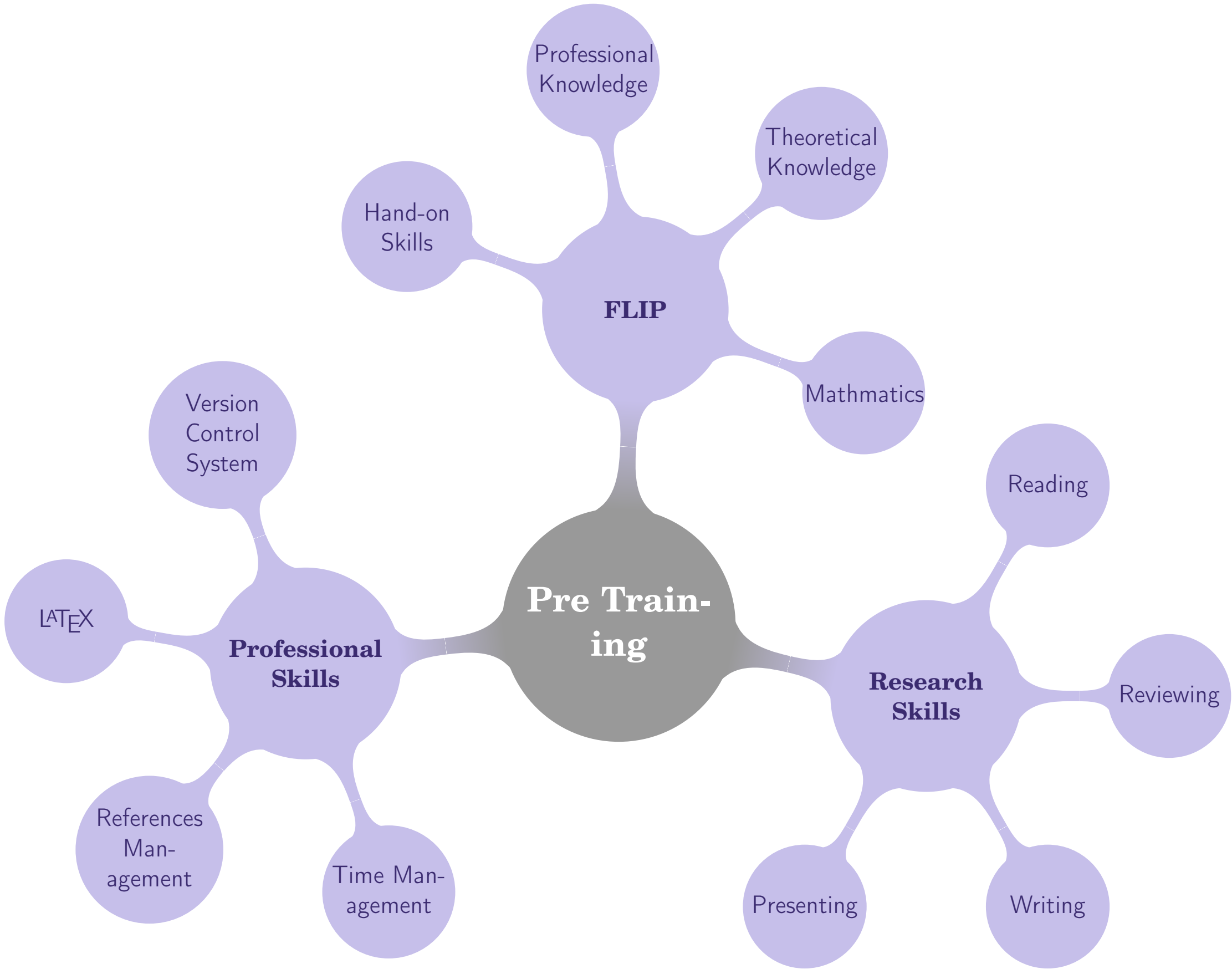
Services

-  NEXUS-S1
-  NEXUS-S2
-  NEXUS-S3



Pre-NEXUS Skills

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Do and Do Not

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DO

- Be *proactive*
- Read More, Write More
- Find resources and tools proactively
- Reproduce the work and simulate the writing from top papers
- Seek feedback from peers
- Actively participate in the NEXUS-S1 Google Group discussion
- Actively participate in the fortnight online NEXUS-S1 meetings



DO NOT

- Do not be *passive*
- Not in “*Academic writing in English*”
- No ethical issues such as *plagiarism, double submission*
- Do not oversell your own work
- Do not wait for instructions, come up with your own ideas
- Do not miss the deadlines
- Do not do everything without communication with supervisors



Questions?

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Contact Information

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[TEAM FOR UNIVERSAL LEARNING AND INTELLIGENT PROCESSING, AUSTRALIA](#)

