

FUNDAMENTALS OF LEARNING AND INFORMATION PROCESSING

SESSION 20: TULIP APPROACH TO RESEARCH (I)



Gang Li

Deakin University, Australia

2024-03-19

|                                   |           |
|-----------------------------------|-----------|
| <b>TULIP Academy</b>              | <b>3</b>  |
| Whom am I? .....                  | 4         |
| Deakin University .....           | 5         |
| TULIP Lab .....                   | 6         |
| <b>NEXUS</b>                      | <b>8</b>  |
| NEXUS Training .....              | 9         |
| Outstanding Alumni .....          | 13        |
| <b>Starting NEXUS Training</b>    | <b>14</b> |
| Recommended Timeline. ....        | 15        |
| NEXUS Resources .....             | 16        |
| Pre-NEXUS Skills .....            | 17        |
| <i>Do</i> and <i>Do Not</i> ..... | 18        |

Table of Content

TULIP Academy  
Whom am I?  
Deakin University  
TULIP Lab

NEXUS  
NEXUS Training  
Outstanding Alumni

Starting NEXUS Training  
Recommended Timeline  
NEXUS Resources  
Pre-NEXUS Skills  
Do and Do Not

TULIP Academy

Whom am I?

- 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



Deakin University

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

Major Rankings.

- Among the **top** 1 % of universities worldwide (*Shanghai Rankings*)
- Ranked in the **Top** 50 young universities in the world (*QS and Times Higher Education*)
- Ranked in the World **Top** 50 – 75 in *Computer Science and Engineering*, the **4th** in Australia (*Shanghai Rankings 2023*)
- Ranked **#1** in Victoria for student satisfaction for the last 11 years (*Australian Graduate Survey*)
- **#1** university in Australia for *education experience* (*2019 Student Survey*)
- **#1** university in Australia for *careers service*(*Australian Graduate Recruitment Industry Awards*)

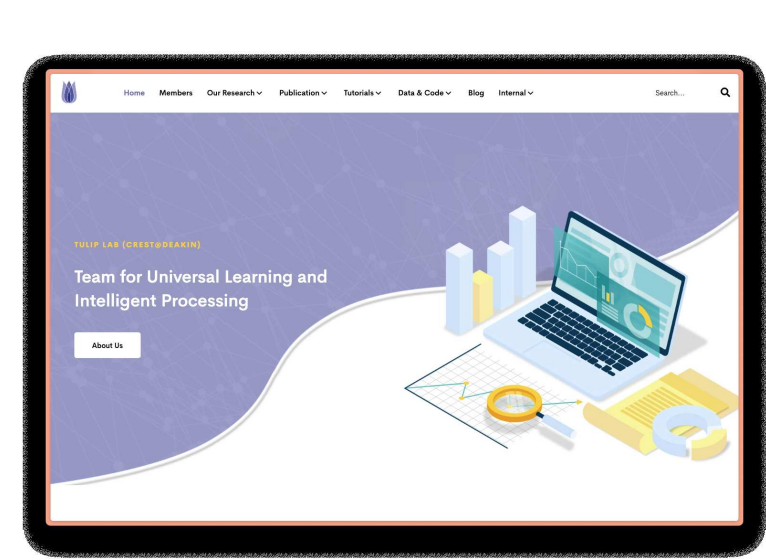


Table 1: Major Rankings of Deakin University

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

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

Team for Universal Learning and Intelligent Processing



👍 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

Official Websites


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

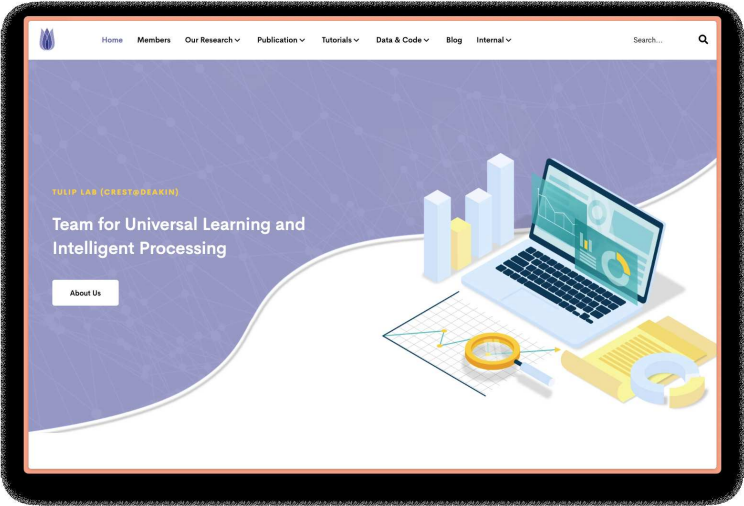
Social Media

-  Twitter
-  Reddit
-  LinkedIn

NEXUS Research Training Program

NEXUS Research Training @ TULIP

 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




(None)-0953862 (2024-03-19) – 12 / 20


## NEXUS Outstanding Alumni



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



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


 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](#),
 [L.J. and Rob Law](#)



[View all authors and affiliations](#)


[OnlineFirst](#) | [https://doi.org/10.1007/978-1-356766722-1\\_40605](https://doi.org/10.1007/978-1-356766722-1_40605)

 Contents

 PDF or ePub

 Cite article

 Share options

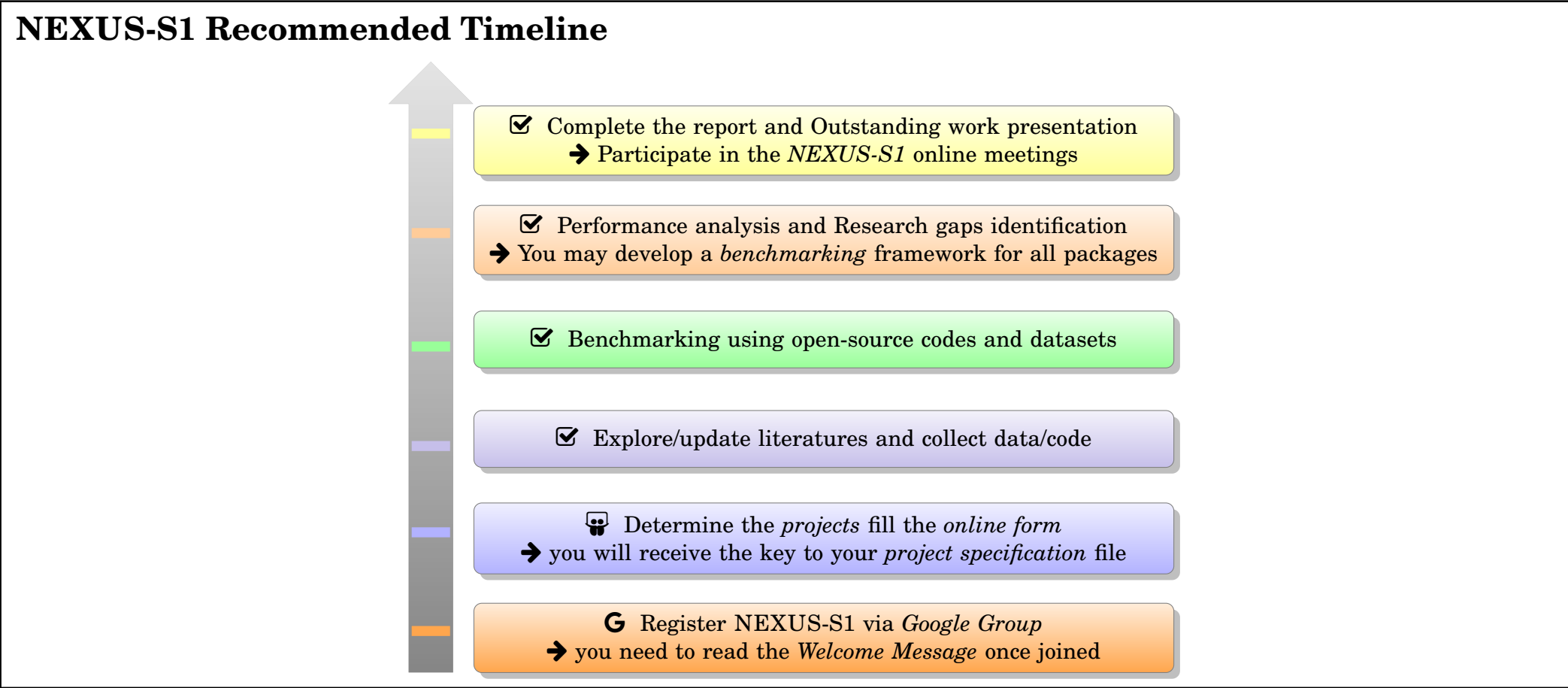
 Information, rights and permissions

**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, relational 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.

9

(None)-0953862 (2024-03-19) – 13 / 20



### NEXUS Resources

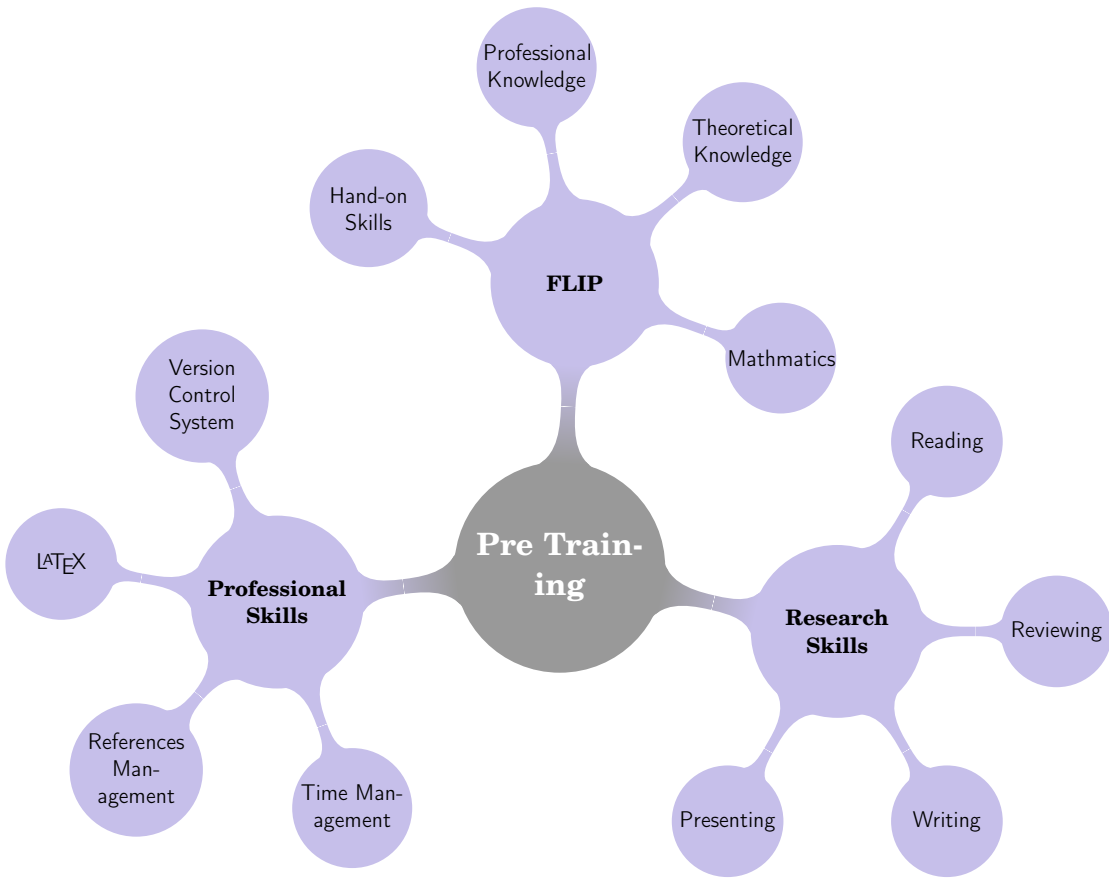
#### Repositories

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

#### Services

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

Pre-NEXUS Skills



Do and Do Not



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?

Contact Information

Professor **GANG LI**  
School of Information Technology  
Deakin University  
Burwood, Victoria 3125, Australia



-  [GANGLI@DUCK.COM](mailto:GANGLI@DUCK.COM)
-  OPEN RESOURCES FROM TULIP-LAB
-  TEAM FOR UNIVERSAL LEARNING AND INTELLIGENT PROCESSING, AUSTRALIA