Critical Inquiry Topics
Semester 2 AY2021/2022

Project ID	Project Title	Supervisor
AC-01	Design of an e-learning prototype	Alton Chua
AC-02	Analysis of a user-driven Question-Answering System	Alton Chua
AC-03	Analysis of communities	Alton Chua
AC-04	Analysis of user-generated content	Alton Chua
AC-05	Deception on social media	Alton Chua
AC-06	Rumors and rumor denials	Alton Chua
AH-01	Topics/Issues in Singapore History	Adrian Heok
AH-02	Issues/topics in organisation management	Adrian Heok
AH-03	Topics/Issues in Contemporary Singapore	Adrian Heok
AH-04	Design Thinking/ UX	Adrian Heok
AH-05	Developing a checklist for evaluating digital libraries for trade	Adrian Heok
AH-06	Access issues in portals for trade	Adrian Heok
BK-01	Leading through stories	Brenda Lee
BK-02	Leadership through storytelling	Brenda Lee
BK-03	Storytelling in speechmaking for an occasion	Brenda Lee
BK-04	Storytelling in speechmaking during a crisis	Brenda Lee
BK-05	Leading in a crisis through stories	Brenda Lee
BK-06	Leading in a crisis through stories	Brenda Lee
BK-07	Storytelling on Video	Brenda Lee
BK-08	Leadership in Literature	Brenda Lee
BL-01	The Social Context of Libraries and Librarians	Brendan Luyt
BL-02	Understanding Wikipedia as a social technology	Brendan Luyt

Project ID	Project Title	Supervisor
BL-03	Domain analysis of academic disciplines or sub-disciplines	Brendan Luyt
CK-01	Graphical visualization interfaces for knowledge graphs of digital content – comparing 3 visualization javascript toolkits	Chris Khoo
CK-02	User Interaction and User Learning on Knowledge Graph Interfaces	Chris Khoo
CK-03	Knowledge Graph of COVID-19 Research Results – Text-Based Interface using ReactJS framework	Chris Khoo
CK-04	Develop a Web API and Web Application for lexicon-based sentiment analysis	Chris Khoo
CK-05	Develop a Web API and Web Application for Information Extraction from text using regular expression patterns	Chris Khoo
CK-06	A Knowledge Graph Application	Chris Khoo
DG-01	Investigating trade digital libraries and their users	Dion Goh
DG-02	Understanding perceptions of deepfakes	Dion Goh
DG-03	Gamification of crowdsourcing tasks	Dion Goh
DG-04	Investigating user experience of novel crowdsourcing interfaces	Dion Goh
FT-01	The Value and Impact on a Business' revenues through the use of Digital Proximity Solutions	Francis Tay
FT-02	Customer Intelligence collection methods and analysis	Francis Tay
FT-03	Digital Transformation	Francis Tay
FT-04	Data Analysis in the Workplace	Francis Tay
FT-05	Data Analytic Tools	Francis Tay
FT-06	Intelligent Automation Solutions and Tools	Francis Tay

Project ID	Project Title	Supervisor
JP-01	Artificial Intelligence in Cyber Investigation and Digital Forensics	Jonathan Pan
JP-02	Artificial Intelligence application for Social Good	Jonathan Pan
JS-01	Perception and use of libraries	Joanna Sin
JS-02	Everyday life information behaviour	Joanna Sin
JS-03	Information inequality: Status, effects, and remedies	Joanna Sin
JS-04	Trending topics in Library and Information Science	Joanna Sin
JS-05	Investigating trade digital libraries and their users	Joanna Sin
LCK-01	Development of a Graph Database (refer to graphs.be)	Lee Chu Keong
LCK-02	Analysis of the Publications of WKWSCI Faculty	Lee Chu Keong
LCK-03	Development of a Grounded Theory of Care Farming	Lee Chu Keong
LCK-04	Development of a Grounded Theory of Therapeutic Spaces	Lee Chu Keong
LCK-05	Philanthropy Then and Now	Lee Chu Keong
LCK-06	Development of a website frontend for Neo4J database Using Python	Lee Chu Keong
LCS-01	Social Media for Teaching and Learning	Lee Chei Sian
LCS-02	Investigating Crowdsourcing	Lee Chei Sian
LCS-03	Making sense of social media data	Lee Chei Sian
LCS-04	The Future of Work	Lee Chei Sian
LCS-05	Effects of Cute Aesthetics Interface Design	Lee Chei Sian
LCS-06	Investigating trade digital libraries and their users	Lee Chei Sian

Project ID	Project Title	Supervisor
LGP-01	Sustainability and greenwashing analytics	L. G. Pee
LGP-02	IT for social good	L. G. Pee
LGP-03	Micro-learning app: A design science study	L. G. Pee
LGP-04	Co-skilling in pre-university learning	L. G. Pee
LGP-05	Co-skilling in adult continuous learning	L. G. Pee
NJC-01	Sentiment Analysis of Social Media Content	Na Jin Cheon
NJC-02	Emotion Analysis of Social Media Content	Na Jin Cheon

AC-01: Design of an e-learning prototype

This project requires students to design an e-learning prototype. Apart from offering domain knowledge, the prototype is intended to support peer-to-peer interactions through text, images and multi-media content sharing. An important goal of this prototype is to enrich the learning experiences of the user in an engaging and novel way. Students undertaking this project need to be interested in pedagogy, educational technology and possess screen design skills.

AC-02: Analysis of a user-driven Question-Answering System

A user-driven question-answering system is one which allows users to pose questions and receive one or more answers from fellow users of the system. This project requires students to analyze a Question-Answering system in terms of its features, functionalities and content. Students undertaking this project need to be conversant with the use of a web crawler.

AC-03: Analysis of communities

This project requires students to analyze the relationship patterns among members of an online community. Members therein may transcend geographical and cultural boundaries but are bound together to pursue mutual goals or interests. The goal of this project is to study how members are brought together, and how they co-create content for the community. Students undertaking this project need to be conversant with the use of a web crawler.

AC-04: Analysis of user-generated content

The advent of Web 2.0 has promoted active user participation. Users can now easily contribute their own content, as well as comment on others'. This project requires students to collect and analyze user-generated content. The goal is to identify themes in the content and examine the interaction patterns among users. Students undertaking this project need to be familiar with web crawling and content analysis.

AC-05: Deception on social media

Deceptions on social media have become increasingly prevalent. This project seeks to better understand the ways in which deceptions present themselves, and how users can fall prey into these deceptions. Students undertaking this project need to be familiar with basic statistical techniques.

AC-06: Rumors and rumor denials

With the rise of the Internet, false rumors are ubiquitous. As a way to combat falsehood, some users and organizations develop rumor denial messages. For rumor denials to be effective, they must be shared. This project studies the factors which affect the virality of rumor denials. Students undertaking this project need to be familiar with basic statistical techniques.

AH-01: Topics/Issues in Singapore History

AH-02: Issues/topics in organisation management

AH-03: Topics/Issues in Contemporary Singapore

AH-04: Design Thinking/UX

AH-05: Developing a checklist for evaluating digital libraries for trade

AH-06: Access issues in portals for trade

Please email the lecturer at adrian.heok@gmail.com to enquire if interested.

Lecturer and students will develop the topic together.

BK-01: Leading through stories

Howard Gardner says that every great leader is a great storyteller. Much of this great storytelling skill is evident in the speeches of the great leader. In this project, students will select a notable woman leader in business or in politics, and study her speeches over the course of her leadership. The goal of the study is to determine the extent of the leader's story use, uncover the types of story that the leader tells, and if possible, examine the effects of story choice on leadership.

BK-02: Leadership through storytelling

Howard Gardner says that every great leader is a great storyteller. Much of this great storytelling skill is evident in the way the great leader communicates, whether orally or in writing or in some other form. In this project, students will select a notable leader from the east, whether in business or in politics, and study his various modes of communication in the context of his leadership. The goal of the study is to determine the extent of the leader's story use, uncover the types of story that the leader tells, and if possible, examine the effects of story choice on leadership.

BK-03: Storytelling in speechmaking for an occasion

This project will analyse the use of storytelling in speechmaking for one type of occasion. Students keen on this project will focus on a select group of leaders who are well-known for their speeches. The goal of the project is to uncover story types and storytelling strategies used by great speakers for that occasion of choice.

BK-04: Storytelling in speechmaking during a crisis

This project will analyse the use of storytelling in speechmaking during a crisis, whether personal or organisational. Students keen on this project will focus on a number of leaders in business and/or in politics, and study the stories they tell in their speeches during the crisis. The goal of the project is to uncover story types and storytelling strategies used by leaders during times of crisis.

BK-05: Leading in a crisis through stories

Howard Gardner says that every great leader is a great storyteller. Much of this great storytelling
skill is evident in the way the great leader communicates, whether orally or in writing or in some
other form. In times of crisis, the leader's skill in using storytelling as a communication tool becomes all the more critical.

In this project, students will take the COVID-19 pandemic as a crisis under study, select the political leaders in a country from the west or the east, and study the stories they tell in various modes of communication in the context of their leadership. The goal of the study is to uncover the types of story that the leaders tell and the reasons for telling them at different stages of the crisis.

BK-06: Leading in a crisis through stories

Howard Gardner says that every great leader is a great storyteller. Much of this great storytelling skill is evident in the way the great leader communicates, whether orally or in writing or in some other form. In times of crisis, the leader's skill in using storytelling as a communication tool becomes all the more critical.

In this project, students will take the climate change as a crisis under study, select key leaders from various spheres of influence, and study the stories they tell in various modes of communication for climate change. The goal of the study is to survey the development of the climate change story as it emerges and evolves to its current status.

BK-07: Storytelling on Video

Students keen on this project will take a story filmed on video that has attracted a significant
amount of traffic, and analyse the attitudinal response of viewers to the story from the comments posted on major social media platforms. The goal of the project is to determine story impact and uncover storytelling strategies used in the video that have contributed to its virality, and if possible, measure the subjective effect of the emotional value of the story on the viewers in objective terms.

BK-08: Leadership in Literature

According to Shoup and Hinrichs (2020), great literature can serve as tutors and mentors in the ways of leadership, equipping leaders and managers with the knowledge and skills to navigate the drama of leadership and engage in meaningful sensemaking to help organizations thrive. The plot and characterizations in novels, novellas, and short stories can act as simulations of real-world situations, fostering empathic growth and prosocial behavior in real-world interactions, equipping readers to properly and adequately handle the often-tangled knot of real-life problems and personalities and improve their social-inference skills.

Students keen on this project will read fiction drawn from the canon of great literature, and elicit key insights useful for effective, empathetic, and ethical leadership.

BL-01: The Social Context of Libraries and Librarians

Libraries and librarians are integral parts of a wider social landscape which shapes and filters their image, policies and general discourse. This project would see students examine some aspect of the relationship with libraries, past or present, and this wider environment

BL-02: Understanding Wikipedia as a social technology

Wikipedia is much maligned in information studies circles as an inaccurate and even dangerous source of information. However, those studies which have been done suggest that its accuracy is comparable to more traditional encyclopedias. What is perhaps of more interest is the social dynamics of the organization as it represents a novel and collective approach to the dissemination of knowledge. Students undertaking projects in this area would examine, with the aid of the instructor, various aspects of these dynamics.

BL-03: Domain analysis of academic disciplines or sub-disciplines

Knowledge is generated by people working within various disciplinary traditions. The study of these traditions is important in order to develop a deeper theoretical and practical understanding of how people look for and use information. The domain analytic approach is one way to study the knowledge traditions of a discipline. In this project students would apply this approach to particular academic disciplines or sub-disciplines.

CK-01: Graphical visualization interfaces for knowledge graphs of digital content – comparing 3 visualization javascript toolkits

Two knowledge graph visualization interfaces have been developed: https://zubirsaid.sg and https://singpioneers.sg. The graph visualization makes use of Cytoscape.JS javascript library. The objective of the project is to:

1. Reimplement the graph visualization using 2 other visualization javascript libraries: Sigma.js (http://sigmajs.org/) and Vis.js (https://visjs.org/), and to compare the features and utility of these with Cytoscape.JS

2. To develop new visualization designs, with new functionalities.

In the current 2 knowledge graph applications, the digital content is organized and linked together using a knowledge graph stored in a Neo4j graph database on AuraDB cloud service. The visualization interface acts as a Web application retrieving information from the cloud database service API. The purpose of the interface is to support user information linking, integration and synthesis (i.e., to help users to construct a coherent understanding/story), and also to support out social network analysis and inferencing of new knowledge using pattern/structure matching.

Requirement: at least 1 team member must be comfortable with coding/scripting. K6307 Organisation of Knowledge course is an advantage.

CK-02: User Interaction and User Learning on Knowledge Graph Interfaces

This is a user study of user interaction with knowledge graph interfaces (https://zubirsaid.sg and https://singpioneers.sg), including information searching to answer questions, as well as learning from a knowledge graph to write a story/narrative.

Requirement: MSc Info Systems students or IT background

CK-03: Knowledge Graph of COVID-19 Research Results – Text-Based Interface using ReactJS framework

During a pandemic, policy makers and healthcare professionals have to make evidence-based decisions quickly, based on scientific evidence. Research papers related to COVID-19 are being published at breakneck speed, making it difficult to keep abreast of research findings of different types and quality. Systematic literature reviews synthesize published research results, but take much time and effort to develop.

This project seeks to develop a knowledge graph interface that presents research results and their summaries in a text-based interface -- to help users to digest and summarize the research results quickly. The interface will be implemented on a Node.JS server using ReactJS+Material UI frameworks to present a systematic review (summary), individual research results and updates of research results.

Requirement: MSc Info Systems students or IT background

CK04: Develop a Web API and Web Application for lexicon-based sentiment analysis

Develop a publicly-accessible Web API and Web application to carry out lexicon-based sentiment analysis using the WKWSCI Sentiment Lexicon. This will be implemented on a

Node.JS and Python server on Google Cloud. The application will tag words in a text with sentiment scores from the sentiment lexicon, and also calculate sentiment scores for sentences and documents.

Requirement: MSc Info Systems students or IT background

CK-05: Develop a Web API and Web Application for Information Extraction from text using regular expression patterns

Develop a Web API and Web application to carry out information extraction using a library of regular expression patterns. This will be implemented on a Node.JS and Python server on Google Cloud. This has many possible applications. The current focus is to extract social network information from the Singapore Infopedia-Personalities pages (https://eresources.nlb.gov.sg/infopedia/Personalities.html)

Requirement: MSc Info Systems students or IT background

CK-06: A Knowledge Graph Application

Student to propose a knowledge graph application
Requirement: K6307 Organisation of Knowledge course

DG-01: Investigating trade digital libraries and their users

Global trade is undeniably an important engine of growth for many economies. Access to timely and relevant information is thus critical for individuals involved in trade-related activities. The project offers two options.

In Option 1, the goal of this project is to develop a checklist of important features for trade-related digital libraries based on literature and existing implementations of digital libraries in general. The project team will then find trade-related digital libraries and evaluate them against the checklist.

In Option 2, the goal is to understand the information needs of users of trade digital libraries, to extent to which existing systems can meet their needs, the challenges they face, and useful aspects of the systems they use. This will be accomplished through an interview of appropriate users.

This project is a collaboration between WKWSCI and Hinrich Foundation, a philanthropic organization focusing on global trade.

DG-02: Understanding perceptions of deepfakes

This project investigates deepfakes, videos that replace a person's face with another. Studying deepfakes is important as people become more dependent on various online information services and could fall prey to misinformation. This project will study how people perceive and respond to deepfakes. Topics include the extent to which deepfakes are believable, why people fall prey to them, and how they verify the authenticity of videos.

DG-03: Gamification of crowdsourcing tasks

One of the challenges of crowdsourcing is to collect sufficient, good quality contributions. Various approaches have been used to motivate participation including appealing to a sense of altruism, and monetary incentives. This project investigates whether gamification can motivate participation. The project team will conduct an experiment that compares a gamified crowdsourcing application against a non-gamified one to evaluate user experience and perceptions of effectiveness. Results will have important implications on the design of crowdsourcing applications.

DG-04: Investigating user experience of novel crowdsourcing interfaces

Critical to the success of crowdsourcing is an understanding of users' perceptions and behaviors when using various applications. This project will investigate how people perceive and use a mobile crowdsourcing application that incorporates cute user interface designs. This design paradigm has the potential to engage users but has not been adequately researched to date. Comparisons will be made against a similar application without cute designs to ascertain differences in user experience.

FT-01: The Value and Impact on a Business' revenues through the use of Digital Proximity Solutions

Students will explore the various ways that businesses can use digital proximity solutions for marketing, customer service, etc. The students will compare how businesses in different markets approach the use of such technologies to have a positive impact on their business.

FT-02: Customer Intelligence collection methods and analysis

Students will look at the array of ways to gather customer intelligence across the various customer touch points. The focus can be on B-to-B or B-to-C business models. Students would develop a framework on what would be a good way to collect customer intelligence for different types of business models.

FT-03: Digital Transformation

Students will research how companies are transforming themselves, if at all. The focus will be on what companies' perception of digital transformation is, what it entails, and are already implementing. Students will write-up case examples as part of their final report.

FT-04: Data Analysis in the Workplace

Students will research what type and level of data analysis is being done, the expectation by companies, and the tools or software used, by employees in companies. The objective is to better understand the job skills expected of employees today and in the future. Students, through interview and surveys, come up with a list of must have skills that employees should have in the future.

FT-05: Data Analytic Tools

Students will do a comprehensive research on the tools available in the market that can be used to conduct basic and advanced data analysis. The objective is to come up with an unbiased toolkit list that can be used by companies for the varying analysis across the value-chain. The final report will be primarily based on secondary research but supplemented with user and/or customer survey.

FT-06: Intelligent Automation Solutions and Tools

Students will research the extent of interest and use of Intelligent Automation solutions in business operations. The focus will be on the awareness, interest and use of solutions and tools like Robotics Process Automation (RPA), Keyboard Automation, WebApps, Virtual Reality (VR) and Augmented Reality (AR). Students will write-up case examples as part of their final report.

JP-01: Artificial Intelligence in Cyber Investigation and Digital Forensics

Artificial Intelligence (AI) algorithms improve Cyber Investigation and Digital Forensics. This project seeks to validate this claim through a developmental experiment. The CI group will need to develop a prototype and validate the claim. Programming and knowledge of artificial intelligence algorithms and cyber security will be the prerequisites.

JP-02: Artificial Intelligence application for Social Good

This project explores the opportunity to apply Artificial Intelligence (AI) algorithms for social good. The project involves identifying a specific problem or challenge associated

with the environment, community or society at large. The project should seek to maximize the positive impact of the novel AI solution. A working prototype and academic report are the expected deliverables for this project. Programming and knowledge of artificial intelligence algorithms will be the prerequisites.

JS-01: Perception and use of libraries

Nowadays, individuals often turn to sources beyond libraries for their information needs. This project aims to study the perception and use of libraries by a specific group (e.g., adolescents, parents, etc.). Researchers may also focus on a particular type of library (e.g., public, school, or academic libraries). The goal is to identify how libraries can improve and promote their services. The study may examine: How do individuals perceive and use libraries and other sources such as social media platforms? What library services are most valuable to the user group? What services do users want the library to provide or enhance? What are the demographic, cognitive, affective and contextual factors that contribute to use or non-use?

JS-02: Everyday life information behaviour

The advent of social media and mobile communication has led to an explosion of information being disseminated through many channels. How do individuals stay informed about daily happenings and topics of interest to them? Researchers may focus on a specific demographic group and investigate some of the following areas: Everyday information needs and information barriers; information behaviour on social media; information overload; credibility assessment; or factors affecting users' everyday life information behaviour.

JS-03: Information inequality: Status, effects, and remedies

Recent technological development has not mitigated the unequal access and use of information resources among different user groups. It may even have exacerbated the digital and information divide. In this project, researchers may study specific demographic groups, types and channels of information (e.g., health information, printed materials, the Internet), and geographic scopes. The study may focus on: mapping and charting the status and changes in information inequality; identifying the factors that contribute to unequal access and usage; examining the effects of information inequality on different groups; or exploring practices and policies that address information gaps.

JS-04: Trending topics in Library and Information Science

Research in Library and Information Science (LIS) plays an important role in informing the effective provision of up-to-date library and information services. This topic explores the subjects and issues central to LIS and its subfields. The research

may focus on: longitudinal changes in topics discussed in Singapore and worldwide; changing usage of theories and methods in LIS research; and differences in topics covered by scholarly publications and informal channels such as social media.

JS-05: Investigating trade digital libraries and their users

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In Option 2, the goal is to understand the information needs of users of trade digital libraries, to extent to which existing systems can meet their needs, the challenges they face, and useful aspects of the systems they use. This will be accomplished through an interview of appropriate users.

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LCK-01: Development of a Graph Database (refer to graphs.be)

In this project, students will be enhancing a graph database of publications. This database has already been deployed at https://graphs.be/, but will need additional features. Students will work on incorporating the data from DBLP (https://dblp.org/). The first part of the project involves studying the structure of the data from DBLP (dblp.xml). The second part of the project involves the parsing the data and incorporating it into graphs.be.

LCK-02: Analysis of the Publications of WKWSCI Faculty

This project involves the analysis of the publications of the past and present WKWSCI faculty. The objective is to parse the data from DBLP into a Neo4J graph database. Bibliometric analysis will then be performed on the data.

LCK-03: Development of a Grounded Theory of Care Farming

Care farming refers to “the use of commercial farms and agricultural landscapes as a base for promoting mental and physical health, through normal farming activity”. Care farms originated in Europe, but has spread around the world. In recent years, care farming has become very important due to the cases of nature deficit disorder. In this project,

students will plough through the care farming literature, and develop a theory of care farming. In the first part, students will study the methodology of grounded theory. In the second part, they will use this methodology to analyse the care farming literature.

LCK-04: Development of a Grounded Theory of Therapeutic Spaces

Therapeutic spaces refer to "the interior built environment in which expressive arts therapy, mental health counseling, psychotherapy, and/or other mental health services take place". They have been "designed and created with intention and purpose… [and] supports the well-being of those utilizing the space". This project examines the concept of therapeutic spaces and develops a grounded theory of it. In the first part, students will study the methodology of grounded theory. In the second part, they will use this methodology to analyse the therapeutic spaces literature.

LCK-05: Philanthropy Then and Now

Philanthropy involves charitable giving to worthy causes on a large scale. This project examines the differences in how philanthropy was practiced in the past compared to how it is in the present. The biographies of Andrew Carnegie, Milton Hershey, Johns Hopkins, Bill Gates, Warren Buffet and George Soros will be analysed.

LCK-06: Development of a website frontend for Neo4J database Using Python

In this project, students will be working on Python (with the Django web framework) to display a graph created from a Neo4j database of companies and their board of directors. Students should have some knowledge of Python, and an interest to explore graph databases. Contact Dr Lee directly to obtain more information.

LCS-01: Social Media for Teaching and Learning

This project examines the use of social and mobile communication media for teaching and learning. Educators are increasingly interested in the social tools available to facilitate engagement and encourage learning. What trends are emerging for teaching and learning? What are the motivations driving educators and students to use some tools? What concerns might be keeping educators and students from using them? How should learning be conducted in the new "normal"?

LCS-02: Investigating Crowdsourcing

Crowdsourcing is the practice of engaging a 'crowd" or a group for a common goal. Put differently, crowdsourcing relies on the power of the crowd and has the ability to draw

from the collective memory, expertise and experience of other people. The project will investigate different crowdsourcing approaches/techniques for play and work.

Examples of projects include: (1) Motivations for participating on a crowdsourcing platform. (2) Incentives and mechanisms (including gaming techniques) to motivate participation on a crowdsourcing platform. (3) Exploring the feasibility of crowdsourcing at work. (4) Developing mobile crowdsourcing applications for different contexts of use. (5) Investigating factors influencing quality of participation on a crowdsourcing platform. Students who are interested to explore crowdsourcing can also propose related projects.

LCS-03: Making sense of social media data

This is an interdisciplinary research project that explores the use of computation techniques and analytics to provide insights from social media data.

LCS-04: The Future of Work

This is an interdisciplinary research project that examines the challenges and opportunities in the future workplace. New technologies, data analytics and online social networks have huge impacts in the workplace by enabling new ways to communicate and collaborate. Indeed, they have created new industries and business models as well as disrupted some traditional industries. Possible (but not limited to) research areas in this project include: examining job characteristics and hiring practices in the future workplace, investigating the roles played by intelligent technologies in the workplace, studying the changing nature of work in the different industries.

LCS-05: Effects of Cute Aesthetics Interface Design

This project aims to explore the cognitive and affective effects of cute aesthetics design (mobile and web-based application) on online user behaviors. Specifically, the project will examine how cute aesthetics interface design effects user experiences and usage intention across different demographic profiles and different types of online applications (mobile and web).

LCS-06: Investigating trade digital libraries and their users

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general. The project team will then find trade-related digital libraries and evaluate them against the checklist.

In Option 2, the goal is to understand the information needs of users of trade digital libraries, to extent to which existing systems can meet their needs, the challenges they face, and useful aspects of the systems they use. This will be accomplished through an interview of appropriate users.

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LGP-01: Sustainability and greenwashing analytics

LGP-02: IT for social good

LGP-03: Micro-learning app: A design science study

LGP-04: Co-skilling in pre-university learning

LGP-05: Co-skilling in adult continuous learning

Please email the faculty at peelg@ntu.edu.sg to enquire if interested.

NJC-01: Sentiment Analysis of Social Media Content
Sentiment analysis is a type of subjectivity analysis which analyses sentiment in each textual unit with the objective of understanding the sentiment polarities (i.e., positive, negative, or neutral) of the opinions toward various aspects of a subject. The CI group will investigate sentiment analysis of user generated content using machine learning algorithms. Especially, the CI group will explore aspect-based sentiment analysis of social media content using a deep learning approach. Text/Data mining and computer programming skills are required for the project.

NJC-02: Analysis of Online Discussions about Emerging Subjects in Singapore
This project aims to understand main topics (or concerns) and trends in online discussions about emerging subjects (e.g., immigration and LGBT) in Singapore. The CI group will crawl relevant user-generated content on social media platforms, such as reddit, hardware-zone, and Twitter, and analyze the data using text mining approaches, such as topic modeling. Web scraping and text mining skills are required for the project.