

REFLECTING DISTANT IDENTITIES

Digital Interactive Museum

Service-Learning in Borneo

The project is a collaboration between the Advanced Centre for Sustainable Socio-Economic and Technological Development (ASSET), University of Technology Sarawak (UTS) and World Fuzhou Heritage Gallery, Sibü.



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The Digitization of World Fuzhou Heritage Gallery

About the project

Due to the global pandemic, the museums and cultural organizations have sped up the adoption of technology and online modalities, with varying degrees of success. In reality, the crisis has worsened pre-existing structural problems and revealed the fragility of practitioners and institutions in this sector. The Distant Identities case brings together an international team of computer science students from the University of Technology, Sarawak, and interaction design students from Malmö University Sweden to collaborate in achieving the mission of the World Fuzhou Heritage Gallery—reconnecting young Fuzhou descendants to their heritage and cultural identity. In this project, we developed products and services by using sympathetic, respectful co-design

frameworks, dialogue, and agonism, and explore the difference between empathy and sympathy in light of these methods throughout the co-design process, and navigate the sensitive waters of heritage and cultural identity using empathy.

The 36 students of UTS, 6 students of Malmö University, Sweden, divided in 10 groups supervised by Four academic staff and a project coordinator, developed 8 prototypes, 6 Augmented Reality applications, an inventory database, a website for the gallery, and an android based game for experiencing and learning Fuzhou resettlement journey to Malaysian Borneo. The academic goal of the project is to design and develop digital technologies within a localized context by engaging students with social communities and local cultural organizations.

The Community Partner: Fuzhou World Heritage Gallery

The Fuzhou World Heritage Gallery (the world's biggest Fuzhou heritage collection with over 600 exhibits) is located at Jalan Salim, about 10 minutes drive from the Sibul town and housed in the Centennial Building for Sibul Fuzhou Settlement along with the head offices of the Sibul Fuzhou Association, the Sarawak Federation of Fuzhou Associations and the World Fuzhou Association.

The gallery is the first museum of Fuzhou culture in overseas Chinese society. It focuses on the migration history of the Fuzhou clan to Sibul and the traditional Sibul Fuzhou lifestyle. The exhibition includes the images of honored pioneers, the events of Sibul, as well as farming, logging, carpentry, rubber tapping and cooking artifacts. The gallery also maintains a special collection of Fuzhou literature as a research resource. The gallery published a book called Tastes and Flavours of Fuzhou in November 2010. The book is based on a field survey of the ancestral homeland in March 2010. Its contents encompass the traditional and modernized Fuzhou cuisines in the ancestral homeland and Sibul. Readers can attain a better understanding of the so-called genuine Fuzhou cuisines and the lately invented ones in Sibul. The gallery demonstrates crystallization of localized and transnationalized Fuzhou identity.



Human-Computer Interaction (CSS3553)

The Course Introduction

CSS3553 course and activities are structured against a backdrop that is made up of a range of issues of global and local significance, including the geographical location of UTS, the pandemic, current challenges and opportunities due to the adaptation of information technologies and digital modalities, and the disruptions and restricted access to the cultural institutions. The classroom learning material includes theories, methods, and tools of HCI, and besides, students were exposed to multiple facets and perspectives of cultural preservation and digitization with an emphasis on identity issues. A pre and post-test and individual and group reflection exercises are parts of the assessment to evaluate students' civic awareness, integration of learning and practice in a specific context, and critical consciousness of actions. The course brings together three intertwined discourses – the museum's digital transformation, Service-Learning and HCI practices.

HCI Service Learning at a glance

- The project is one of the 25 finalists (443 participants from 34 countries) and winner of Entrepreneur Prize in the UNESCO TechCul 2021 Online Ideathon (<https://techcul.org/>).

- The students (34) contributed a total of 400 gross man-hours to the projects in the semester. Each student contributed 42 gross man-hours, which includes 20% of the time on-site under the supervision of three academic staff.



34
students

400 gross
man-
hours

20% of the
time on-
site

Techcul
2021
Award

Human-Computer Interaction (CSS3553)

The Course Structure

Course Contents

Week 1: Introduction to HCI and Service Learning,
Week 2: An introduction to 4th wave of Usability Paradigm
Week 3: Design in the Wild
Week 4: Requirements: HCI Design Methodologies
Week 5: Requirements: HCI Methods
Week 6: Requirements: HCI Tools
Week 7: Community visit: Engagement and Requirement Analysis
Week 8: Design: Interaction Design, Interaction Styles
Week 9: Design - cont. Choosing Interactive Devices: Hardware and Software, Moving from Choosing Components into Design Areas, Designing a Graphical User Interface
Week 10: Community visit: Co-Designing User Interface
Week 11: Evaluation, Reasons of Usability and User Interface Evaluation
Week 12: Testing in the Wild
Week 13: Evaluation - Community visit: Testing in the Wild and Community Presentation
Week 14: Course Wrap-up

Course Activities

Week 1: Briefing, SL supervisor meeting with the partner community, Pre-Test: Civic responsibility
Week 2: Project Group Formation
Week 3: Workshop - Augmented Reality
Week 4: Preparation for the Community visit
Week 5: Trainings on photography, community interaction protocols, how to handle museum's artifacts
Week 6: Planning for the visit
Week 7: First visit - Engagement
Week 8: Reflective Journal, Post-visit group reflection
Week 9: Design Presentation
Week 10: Second visit - Co-Designing session
Week 11: Reflective Journal, Post-visit group reflection
Week 12: Testing the prototypes
Week 13: Visit 3- Testing in the wild and Community presentation
Week 14: Post Test: Civic responsibility
Story Circle: Post-visit Reflection





The Project Activities and Outcomes Acheived

Mobile Applications and Products

- Booklets and Augmented Reality Applications for **Six (6)** sections of the heritage gallery;
 - Fuzhou's Houseware
 - Fuzhou Traditional Tools
 - World Fuzhou Agriculture Artifacts
 - Fuzhou Fashion Gallery
 - Journey of Machines
 - Artifacts - Boxes and Baskets
- Heritage Contents Management System
- Fuzhou Heritage Gallery Website
- Digital Game for the journey of Xin (Digital Mural)





Rachel Wong



Voon Soon Seng



Alvia Tan



Dennis Eu Ming



Ting Siong Heng



Saranya



Teng Wei Yuan



Gan Jia Luk



Daniel Chia

Class HCI 2020-2021



Mohd Azmir



Vincent Yii



Linus Ling



Lilian Lau



Stephen Yong



Michael Lim



Lewis Wong



Eric Yap



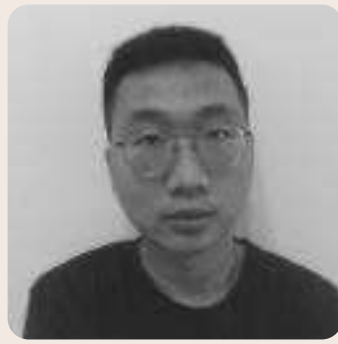
Lau King Leong



Aderline Song



Lee Phin Haou



Ernest Hii



Ellen Wong



Siah Tuong Chuan



Lau Poh Chen



David Lim



Muhammad Amir



William Ting

Class HCI 2020-2021



Ling Bi Hao



Raymond Ngu



Anderson Wong



Connie Bong



Daniel Lye



INTERNATIONAL

COLLABORATION

Distant Identities - Design Possibilities for the World Fuzhou Heritage Gallery

The project enacted a partnership between UTS, the Fuzhou heritage gallery and Malmö University of Sweden. Six (6) international students of the Interaction Design Master's programme (Malmö University) worked with Four (4) undergraduate students of Computer Sciences (SCM) and gallery staff to find new entry points for utilizing technology, to support Fuzhou citizens in connecting to their cultural identity and learning about the culture. The students organized weekly meetings for Six (6) weeks and used digital tools for co-designing digital infrastructure for the gallery. The digital infrastructure consists of a series of prototypes (with a digital element) that:

- reflects the students contextual learning
- inspires the next Service-Learning group
- helps the gallery staff and management to articulate to their future organizational goals



Saranya A/P Balasubramaniam

Saranya is currently an undergraduate student of Bachelor of Computer Science in University of Technology Sarawak. She was born and raised in Kuala Lumpur, the capital of Malaysia. After completing her Foundation in Business in Heriot-Watt University, she decided to further her studies in Sarawak as she wanted to have a "new" experience. She enjoys traveling and taking part in social service activities. She was an active member of the Rotaract Club of Pantai Valley which helped her engage and explore boundless opportunities. In her free time, she enjoys listening to music and also watching videos related to coding.



Ellen Wong Yin Ting

Ellen Wong, currently a 2nd-year student of Bachelor of Computer Science in University of Technology Sarawak. She is interested in video editing, design and front-end development for computer applications. Besides her academic interest, she enjoys spending time on outdoor activities, watching movies, listening to music, and spending time in nature. She is willing to step out of her comfort zone to learn and explore new things.





Cheng Haw Yih (Dennis)

Cheng Haw Yih is a descendant of Fuzhou. He is currently doing his internship in the University of Technology Sarawak, Sibu. He worked as the project coordinator in IPID-Asia Chapter and engaged as a tutor with the HCI Service-Learning program. He is currently planning to take a Master degree and he is interested to explore co-designing technologies with underserved communities. He loves music and musicians.

Sia Yuk Heng

Sia Yuk Heng is an undergraduate student studying Bachelor of Computer Science in University of Technology Sarawak. He is a .NET developer and has a good experience on developing mobile applications, databases and web API. He wishes to become an expert on mobile back-end. He likes to explore unknown and challenge the technical problem.





Marie Kaiser

Marie is a first-year student in the Interaction Design master's programme at Malmö University. After her bachelor's in media studies and fashion textile design in Paderborn, Germany, Marie moved to Vienna, Austria to work in Content Marketing for the digital healthcare company mySugr. Supporting their mission to simplify life for people with diabetes, she worked on SEO-optimized blog and social media assets. With her background in content creation, she is currently still working as a copywriter for blog posts, social media and in-app copy. She has a passion for designing with technologies, starting from using it as a tool when creating illustrations to creating meaningful designs that shape human-computer based interactions.

Rixt Baron

After graduating from Hanzehogeschool Groningen in The Netherlands, Rixt started the first year of the Interaction Design master at Malmö University Sweden. She has experience in different subjects such as art & sound, game design, multimedia advertising and graphic design. Besides that she studied a semester of Creative Media and Film at Northern Arizona University where she worked on various short films. Rixt has a love for instruments and creating music. She has previously completed an internship at an international record label where she uploaded videos for the Brilliant Classics youtube channel and made sure their social media and subscriber count kept growing.





Viničius Sueiro

With a bachelor's in design from University of São Paulo, Viničius Sueiro is currently studying for his master's in interaction design at Malmö University, where he tries to envision nuanced behaviors between technology and humans. Also, he recently helped a Swedish NGO on creating global-facing projects. At Datastory, they focused on turning important issues into beautiful tools, free for everyone. Before that, at Questtonó, an innovation consultancy in Brazil, Viničius helped companies like Ambev by creating early prototypes and conducting face-to-face user research. As a lead information designer, he helped a team of 5 people in projects that combined data, design and web development at Estadão, a major Brazilian media company. Viničius is also an indoor rock climbing enthusiast, air drummer and vegan food lover.

Connie Oh

Connie Oh is a first-year interaction design student at Malmö University, Sweden. Living and working in San Francisco, she's developed her career in tech as a Visual Designer and Production Lead at IDEO, a global design consulting agency. She is continuing to pursue design opportunities in technology and human behavior through her studies in Interaction Design. In her personal life, she is a novice sourdough baker, influenced by San Francisco's Chad Robertson of Tartine Bakery. She enjoys making bread from starter culture and eating bread with lots of butter. Connie is also one who is easily amused by watching animals on YouTube doing cute animal things. Send her a link to your favorite video of animal antics—animantics! (She also enjoys making up words.)



Amanda Asplund

Amanda is a first-year interaction design student at Malmö University, Sweden. After studying communication design in Australia, she worked in a Sydney-based design studio where she specialised in branding and packaging design. After a few years, she moved to Sweden where she worked as an Art Director for an advertising agency, developing multimedia campaigns and strategies for brands. Amanda is now deepening her knowledge in the field of interaction design, with the hope of designing better experiences for people in their everyday life. Amanda loves painting, and she sometimes does illustration jobs for wine labels, books and invitations.

Naomi Strandberg

Naomi Strandberg is currently a first year interaction design student at Malmö University. Growing up in Silicon Valley, constantly surrounded by computerese and guided by peers and parents alike down the track of engineering, has prepared her for life in the technology industry. However, she never felt this was the path for her. Only in the last few years has she discovered that user experience would be the perfect blend of what she was brought up with – engineering and technology – and what she hopes to do – designing and helping others. Her academic career started with a major in Psychology and a minor in Linguistics at the University of California in Santa Cruz, which naturally led to working as a research assistant in a psycholinguistics lab examining serial versus parallel processing. This interest in the workings of the brain naturally transitioned to a Cognitive Science and Psychology master's at Umeå University, where she later on discovered human-computer interaction and user experience. Being born and raised in Silicon Valley ushered her towards the technology field, but growing up witnessing the effects of mental illness has geared her towards psychology. As a result, whether through her first love of clinical psychology or through an understanding of necessary improvements in technology, she is dedicated to helping others. Moreover, her fascination has always been with how people think and behave, and user experience research allows her to bridge these two elements – comprehending the perceptions of and aiding others – together.



PARTNERSHIP

COMMUNITY PARTNER

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