Koh Hui Juan

Mobile: 84090068 | Email: huijuankhj@gmail.com | Portfolio: https://huijuank.github.io/ | LinkedIn: linkedin.com/in/koh-hui-juan

EDUCATION

Singapore University of Technology and Design

Singapore

• Bachelor of Engineering (Engineering Product Development), Honours

May 19 to Present

- Focus Track: Computer Engineering Track
- Minors: Computer Science, Digital Humanities
- GPA 4.22/5.0, SBF Foundation SUTD Scholarship Recipient
- Expected Date of Graduation: Sep 2022

WORK EXPERIENCES

WS Audiology
R&D Hardware Electroacoustic Design, Summer Intern, Hybrid Arrangement
Dec 19 to Jan 20

- Refined the GUI of a semi-automatic magnetic radiation measurement system to be more intuitive and less error-prone using PySimpleGUI on Python and added 3 data post-processing features using OpenCV and Matplotlib.
- Completed magnetic radiation measurements of hearing aid components using the developed GUI to assist senior engineers in the analysis of the cause of deviations in values obtained from experimentation efforts.
- Developed a Python-based package of an anomaly detection model using an unsupervised learning approach (i.e. autoencoders) for the detection of noise in audio recordings of hearing aids to detect malfunctioning devices during testing.
- Prepared and measured the vibroacoustic behaviour of 100+ hearing aid sub-system samples using a laser doppler vibrometer, to derive the optimal configuration and materials for a new hearing aid device under a forefront research project. Presented directly to external vendors to discuss revisions in sub-component configurations.

ACADEMIC PROJECTS

Singapore University of Technology and Design TraveLog: Collaborative Travel Planner, UI/UX Designer

Singapore

Jan 22 to Apr 22

- Spearheaded a team of 4 in a project to develop an all-encompassing, collaborative website to streamline travel planning.
- Designed the UI/UX of the website using Figma through 3+ iterations of wireframing, prototyping, and user testing.
- Evaluated the final high-fidelity prototype analytically (10 usability heuristic, cognitive walkthrough) and empirically (keystroke logging, think aloud, survey)

Singapore University of Technology and Design Herb-Drug Interaction Database for Cancer Chemotherapy, UI/UX Developer

Singapore

May 20 to Aug 20

- Led a group of 3 to produce a herb-drug interaction database web application for clinicians from conception to delivery.
- Designed the high-fidelity database on Adobe XD and achieved 100% user satisfaction through weekly iterations of wireframing and prototyping based on interview feedback of pharmacists.
- Developed the corresponding responsive web application using HTML, CSS, JavaScript, PHP, and MySQL.

OTHER PROGRAMMES AND HACKATHONS

Spark-A-Life Hackathon, 1st Runner Up UI/UX Designer

Singapore Mar 20 to May 20

- Initiated Pocket Helpers, a gamified dementia-themed donation mobile application with key business goals to raise awareness and funds for people with dementia, from conception to delivery.
- Employed an extensive concept generation and evaluation process (i.e. surveys, benchmarking with existing solutions, Real-Win-Worth, and personas) before creating wireframes and prototyping the UI/UX of the tower defense game on Figma.
- Collaborated with a graphic designer and front-end engineer using the agile development framework to ensure quality delivery.

Design Odyssey DRIVE Programme, Best Business Pitch Co-Founder cum UI/UX Designer

Singapore May 19 to Dec 19

- Launched a fully functional start-up idea of travel mobile application for plan customisation and route optimisation, with a complete business model and over 100 potential customers.
- Secured funding of \$300 to support a minimum viable product creation, and subsequently created the high-fidelity prototype on Adobe XD through 3+ iterations of wireframing, prototyping and user testing.

ADDITIONAL INFORMATION

- Design: User Research, Wireframing, Prototyping, User Testing
- Web Development Tools: Figma, Adobe (XD, Illustrator, Dreamweaver), Miro
- Web Development Code: HTML, CSS, PHP, JavaScript, MySQL
- Other Code: Python (Tensorflow, Keras, OpenCV, Pandas), MATLAB
- Fluent in English and Mandarin (spoken & written)