### Teo Yu Wen

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#### **EDUCATION**

#### SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

BEng (Engineering Systems and Design), cGPA:4.07

Business Analytics and Operations Research, Financial Services

Relevant Coursework: Business Analytics, Data Analytics, Optimization, Simulation, UI/UX

Singapore Sep 2021 to May 2025

#### SUNGKYUNKWAN UNIVERSITY

Selected to participate in the Global Experience Program awarded to top 30% of cohort Awarded international summer program scholarship

South Korea, Seoul Feb 2024 to Jul 2024

#### WORK EXPERIENCES

# HOME TEAM SCIENCE AND TECHNOLOGY AGENCY (HTX)

Biometrics & Profiling Intern

Jul 2024 to Sep 2024

- Developed and implemented a Python-based data pre-processing pipeline, enabling more accurate eye-tracking metrics. Identified and analyzed positional bias in images, leading to improved experimental design and data integrity
- Transformed complex eye-tracking datasets into actionable insights through data visualization techniques (Seaborn) and presented strategic findings to senior management
- Conducted root cause analysis on system bugs using video recordings, identifying and resolving critical software issues

#### **ACCENTURE**

#### **Business Analyst Intern**

Aug 2023 to Dec 2023

- Conducted System Integrated Testing (SIT) for 10+ enhancements, created 50+ test cases per sprint and reusable test data from the Functional Requirement Documents, developed application specific SQL queries for website functionality testing in an AGILE environment
- Executed test cases, documented defects using JIRA, and communicated with the development team, allowing them to prioritize and focus on critical tasks based on priority and system issues
- Facilitated User Acceptance Testing (UAT) by working together with business analysts to document the MVPs, revise the test scripts based on client feedback and streamlining the process using well documented artefacts

#### **ACADEMIC PROJECTS**

# SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

**Detection of familiar objects in suspects (Python & Figma)** 

Singapore Sep 2024 to May 2025

- Partnered with Home Team Science and Technology Agency (HTX) to develop an eye-tracking familiarity detection web application to assess suspect recognition of objects
- Led a cross-functional team of six—overseeing tasks across development, design, and data—while preparing weekly agendas and facilitating group updates, ensuring timely completion and adherence to the project timeline
- Led the UI/UX team by employing design thinking methodologies—conducting user research and interviews, creating user journey maps to identify user needs, performing stakeholder and affinity analyses, and defining personas
- Wireframed 20+ screens using Figma and organized user feedback sessions with 30+ stakeholders on the wireframes, collaborating closely with clients to build an intuitive, user-centric interface for the application
- Conducted data post-processing on raw eye-tracking data using Python, pandas, Matplotlib, and scikit-learn—developing
  heatmaps for data visualization, coding a custom dashboard for post-experiment analysis and utilizing logistic regression to
  predict the accuracy of the familiarity detection model

#### Optimization of Yeo's vending machine sales collection (PowerBI)

Feb 2023 to May 2023

- Worked with Yeo's in rerouting vending machine collection methods to increase profits
- Held biweekly client meetings to gather feedback and collaborated closely to deliver tailored solutions
- Created interactive PowerBI dashboards to visualize overall sales per product and analyze route performance which allowed the client to understand their business operations and offered insights on which routes should be prioritized
- Utilized Excel Macros to streamline data cleaning processes, improving efficiency

#### Cinema Scheduling Dashboard - I Like To Movie Movie (YouTube Video)

May 2023 to Aug 2023

- Designed and developed a cinema time scheduling application with drag and drop functionalities using RStudio, HTML, CSS and JavaScript to hone user's strategic decision-making skills by evaluating performance metrics on profit, demand and utilization
- Spearheaded the comprehensive design and development of the UI/UX for the game, gathered feedback from professors and beta users and undergone iterative design processes to ensure that the game had a straightforward, user-friendly interface
- Created storyboards, system architecture framework, use case analysis and operational concept sketches using Adobe Illustrator

#### **Kaggle Competition – The Analytics Edge 2023 (RStudio)**

May 2023 to Aug 2023

- Led a team of four, guiding overall strategy, data analysis, model development, and report submissions, resulting in a 9th overall ranking.
- Evaluated multiple algorithms before selecting XGBoost based on performance benchmarks, implemented feature engineering and hyperparameter tuning to maximize accuracy
- Established collaborative workflow by assigning tasks to each member's strengths and tracking progress, ensuring efficient execution and teamwork.
- Applied critical thinking to assess trade-offs between model complexity and interpretability, making data-driven decisions with the team that provided a competitive edge in the competition

#### **Netflix Equity Valuation**

Sep 2024 to Dec 2024

- Conducted an equity valuation project on Netflix, leveraging an ad-hoc valuation model, in-depth thesis research, and Bloomberg terminals to gather reports, financial statements and competitor data
- Developed a custom discounted cash flow framework—integrating assumptions on live sports streaming content and ad revenue—and performed scenario testing to evaluate key risk factors over a 36-month horizon
- Delivered a 15-minute presentation and authored a comprehensive written report, culminating in a 'sell' recommendation based on the valuation outcomes

#### SUNGKYUNKWAN UNIVERSITY

Korea

Feb 2024 to Jun 2024

#### **Investment Analysis Paper Trade**

- Led a team of 4 in an investment analysis project, conducting in-depth market research and ETF analysis to maximize returns
- Performed risk assessment, portfolio diversification and performance forecasting based on current market trends, delivered a comprehensive investment strategy, leading the team to achieve 1st place in the investment analysis paper trade project

#### UNIVERSITAS GADJAH MADA

Indonesia

**Design Thinking Innovation Project** 

Jan 2023

- Collaborated with students from Indonesia and Singapore across various disciplines to design innovative historical puzzles aimed at nurturing children's learning
- Applied the Double Diamond design process, including empathizing with the target audience, defining key problems, ideating solutions, prototyping and testing to develop the final puzzle models
- Utilized 3D printing and additive manufacturing knowledge, and used Autodesk Fusion 360 to create CAD models of the puzzles

#### **COMPETITIONS**

#### HSBC Global Private Banking Case Challenge 2024 (HK and SG)

Collaborated with a team of 4 to analyze the private banking case scenario, identified portfolio gaps and proposed strategic asset re-allocation based on market outlook and client's risk appetite

#### Adobe Analytics Challenge 2024

- Collaborated with a team of 3 to analyze real-world data from a leading automaker, including website traffic, email campaigns and customer leads.
- Utilized Adobe Analytics to draw actionable insights to support marketing and sales strategies

## **IISE/DAIS Data Analytics 2025 Competition**

Actively participating in the 2025 IISE "Nursing Home Staffing Hour Prediction Triathlon," performing preliminary data exploration on a 100-nursing-home dataset to develop point and interval forecasts for CNA, LPN, and RN staffing hours.

#### **CO-CURRICULAR ACTIVITIES**

What a Catch (WAC) Frisbee Member

Korea

Feb 2024 to Jul 2024

Participated in weekly frisbee trainings together with locals and international students

#### YEAH! Program

Singapore **Sept 2021 to Dec 2022** 

Volunteer & Facilitator

- Taught math to primary school students from lower-income families, selecting exercises and curating worksheets to support diverse learning needs, resulting in improved comprehension and active student engagement
- Collaborated with program staff to plan and organize weekly activities, ensuring educational and engaging sessions for all children. Provided creative input on new activities and coordinated resources for successful program delivery

# YISS STEM Learning Festival Student Facilitator

Singapore May 2022

Assisted SUTD Professors in conducting biodegradable material workshops for secondary school students

# ADDITIONAL INFORMATION

- Proficient in Excel Macros, RStudio, PowerBI, Word, Powerpoint, Adobe Illustrator, Python, SQL Lite, JIRA, Figma, CSS, VBA
- Fluent in English and Mandarin (spoken & written)