

## Kango Lee Zhen Xiong

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### EDUCATION

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**Singapore Management University (SMU)**

**Aug 2021 – May 2025**

**Candidate for Bachelor of Science (Information Systems):**

**Smart City Management and Technology Major & Sustainable Technologies Major**

#### Projects:

- **Airline Data Analysis:** Built a data pipeline to analyze historical flight data using AWS big data pipeline tools to uncover flight patterns related to major holidays, events, and flight delays
- **Sentimental Analysis:** Using web crawlers and NLP tools, extracted social media data to analyze historical trends in attitudes towards immigrants
- **Pre-order Platform:** Built a video game pre-ordering platform using SOA concepts via Flask, Docker, MySQL

### EXPERIENCE

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**Singapore Management University**

**Sept 2022 – Present**

**Cooling Singapore 2.0 Research Assistant**

- Conduct fieldwork for data collection through a network of sensors, a mobile weather station, and live interviews and surveys for urban overheating and outdoor thermal comfort analyses
- Create and optimize scripts for extraction, transforming, and loading (ETL) climate and environmental data using R and Python, increasing efficiency by 80%

**Urban Redevelopment Authority**

**Aug 2023 – Nov 2023**

**Strategic Planning Intern**

- Conducted comprehensive research into emerging technological, social, and ecological trends, analysing their potential impact on the future of Singapore's urban planning
- Contributed to the research and development of the Singapore Master Plan 2025
- Contributed to the planning and execution of stakeholder engagements, fostering collaboration with industry leaders, think tanks, and academic experts
- Studied global policies, initiatives, and methodologies employed by planning and developmental agencies worldwide extensively

**National Environment Agency**

**May 2023 – Aug 2023**

**Data Analyst Intern, Systems and Protocols Branch**

- Developed a workflow for automated risk assessment of thousands of premises' risk profiles and audit frequencies using Excel (Formulas, VBA, Power Query) and statistics using internal data
- Engaged public and private stakeholders to educate, and enforce audit and cleanliness issues through audits
- Enhanced audit-related process automation in Excel, cutting monthly loading times by 10 hours every month
- Authored an analysis report and delivered a comprehensive presentation to upper management, summarising the internship project and highlighting workflow changes and recommendations

### PROJECTS & ACHIEVEMENTS

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**Digital Mapping Lead, Youth Stewards for Nature Program**

**Jan 2024 – Present**

- As part of the Nature Kakis Youth Chapter at NParks, I am the co-lead for all digital mapping and GIS-based projects through planning and contributions to forward the cause of community environment stewardship in Singapore

**Merit Winner, MaritimeOne Case Competition**

**Mar 2023 – Mar 2023**

- Achieved the Merit Winner position in the MaritimeOne Case Competition, through the exploration of carbon reduction strategies like direct air capture, carbon-based fuel production, and electrification for Singapore's maritime sector

**Communications Volunteer, MINDS**

**Feb 2022 – Dec 2022**

- Wrote and created content for digital and print corporate publications, newsletters and the 60Stories series
- Liaised with staff and volunteers, crafted stories according to their personal and professional experiences

**Champion, Youth Ecosperity Dialogue (YED)**

**Jun 2022 – Jun 2022**

- Achieved first place in the YED Challenge Hackathon; proposed a plan to PSA Singapore for reducing its Scope 3 emissions contributed by container trucks in and out of Singapore's ports

- Congregated with like-minded individuals from across ASEAN to discuss key sustainability-related topics

## SKILLS & INTERESTS

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- Technical Skills
  - **Languages:** Python, SQL, R, HTML, PHP, Excel VBA
  - **Software:** AWS Suite, Microsoft Office Suite, Excel, Docker, QGIS
  - **Frameworks:** Apache Airflow
  - **Libraries:** Flask, Git, Spark, pandas, matplotlib, PySpark
  - **DB:** MongoDB, MySQL
- Certifications: Microsoft Certified: Azure Fundamental, Google IT Automation with Python
- Language fluency: Fluent in English, Intermediate in Chinese, Basic in French
- Strong passion and desire to work in climate tech, in roles such as data engineering and data analytics