

KLOE NG

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EDUCATION

National University of Singapore (NUS) **Singapore**
Doctor of Philosophy in Management (Real Estate) (GPA 4.8/5.0) *2025 – Current*

Massachusetts Institute of Technology (MIT) **Cambridge, MA**
Master of Science in Urban Studies and Planning (GPA 4.8/5.0) *2022*

National University of Singapore (NUS) **Singapore**
Master of Urban Planning *2015*
Bachelor of Science in Real Estate *2013*

RESEARCH EXPERIENCE

The World Bank Group **Hybrid**
Consultant *Dec 2022 to Present*

- Provided expert consulting services on diverse data analytics and data science projects, collaborating with multiple teams across urban science domains to drive data-driven policymaking.

Massachusetts Institute of Technology (MIT) City Form Lab **Cambridge, MA**
Research Assistant & Graduate Teaching Assistant (Applied Spatial Analysis) *Aug 2019 to Aug 2022*

- Prepare class materials and reviews for a graduate class comprising Master and PhD students from MIT Department of Urban Planning and Studies and Harvard Graduate School of Design.
- Developed and delivered spatial analysis recitations using QGIS, ArcGIS, Python, and CartoDB.
- Class report and projects publication: <https://cityform.mit.edu/projects/workshop-on-city-form>

New York University (NYU) Center for Urban Science and Progress (CUSP) **Brooklyn, NY**
Researcher *2018-2019*

Conducted high-fidelity human behavior studies at SimSpace, utilizing mixed sensing and simulation technologies.

- Investigated pedestrian movement through virtual reality data collection and applied machine learning to enhance urban planning and design.

TEACHING EXPERIENCE

National University of Singapore **Singapore**
Adjunct Lecturer *August 2024 to Present*

- Course Design and Lecturer for Graduate students in the Department of Architecture.
Course title: “Artificial Intelligence in Urban Planning”

MITx PRO | Emeritus **Hybrid**
Learning Facilitator & Lecturer *Jun 2021 to Jun 2024*

- Lectured for Data Engineering and Data Science courses for professionals.

PROFESSIONAL EXPERIENCE

Out of the Box Education, Inc. **Hybrid**
Co-Founder, CEO *2021 to Present*

- Consumer EdTech Startup founded out of MIT (Techstars '21).
- Raised Seed funding – Funded by Goodwater Capital, Rough Draft Ventures (by General Catalyst) + some other VC firms and Angels.
- Ran a successful Kickstarter campaign in 2022 – exceeded funding goals in 5 minutes.
- TIME Best Invention 2022 Special Mention, Fast Company World Changing Ideas Honoree, World Bank Youth Summit Award, MassChallenge Boston Impact Prize, MIT DesignX, MIT IDEAS Award, MIT Sandbox Innovation Fund.

Surbana-Jurong

Strategic and Urban Planner

Singapore

Jul 2015 to Jul 2018

- Managed international urban planning projects, undertaking macro-economic analysis, ROI, marketing strategy, and visioning to global city governments and developers.
- Led the in-house research team for urban planning and earmarked for leadership position.
- Partnered with top global firms like Kenzo Tange Associates in competitive design projects.
- Projects: Singapore Racecourse, Bayshore Precinct, Foz do Rio Itajai, New Clark City, Philippines.

Urban X Maps Studio

Co-founder

Singapore

2015 to 2019

- Passion cartography design project founded on the demand for customized urban art pieces, leading to a monthly 5-figure turnover within the first year, and partnerships with major organizations such as Singapore's National Gallery.
- Featured in media including Business Times, Scoot Airlines In-flight magazine, and Women's Weekly.

SELECTED HONORS & AWARDS

- NUS Research Scholarship
- MIT Legatum Fellowship
- FORBES Next 1000
- Commonwealth Association of Planners, Young Planners Essay Competition — First Prize
- Singapore Institute of Planners, Best Student Project — Silver
- TIME Best Inventions 2022 — Special Mention
- Fast Company World Changing Ideas — Finalist
- World Bank Youth Summit — Finalist & Audience Choice Award
- NYU Policy Case Competition — Spotlight Country Winner
- MIT–Google Hackathon — Top 5
- MassChallenge Boston Impact Prize; MIT DesignX; MIT IDEAS Award; MIT Sandbox Innovation Fund

SERVICE & LEADERSHIP

- Cohort Representative, National University of Singapore
- Executive Committee, National University of Singapore Student Union
- Committee Member (Partnerships), Data Visualization Society

TECHNICAL SKILLS

Languages & Databases: Python, R, SQL, Stata

Machine Learning & Deep Learning: Graph neural networks (PyTorch Geometric), transformer-based NLP & topic modelling (BERTopic, Hugging Face), gradient boosting, scikit-learn, PyTorch

Spatial Data Science: GeoPandas, OSMnx, H3 indexing, spatial econometrics (DiD, hedonic, boundary discontinuity)

GIS & Geocomputation: QGIS, ArcGIS, Grasshopper/Ladybug, CityGML/LOD workflows

Visualisation & Cartography: D3.js, Mapbox GL, Tableau, CartoDB, Adobe Suite

Certifications: Singapore BCA BIM