

## KLOE NG

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### EDUCATION

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<b>National University of Singapore (NUS)</b> <i>Doctor of Philosophy in Management (Real Estate) (GPA 4.8/5.0)</i>	<b>Singapore</b> 2025 – Current
<b>Massachusetts Institute of Technology (MIT)</b> <i>Master of Science in Urban Studies and Planning (GPA 4.8/5.0)</i>	<b>Cambridge, MA</b> 2022
<b>National University of Singapore (NUS)</b> <i>Master of Urban Planning</i> <i>Bachelor of Science in Real Estate</i>	<b>Singapore</b> 2015 2013

### RESEARCH EXPERIENCE

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<b>The World Bank Group</b> <i>Consultant</i>	<b>Hybrid</b> Dec 2022 to Present
<ul style="list-style-type: none"><li>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.</li></ul>	
<b>Massachusetts Institute of Technology (MIT) City Form Lab</b> Research Assistant & Graduate Teaching Assistant (Applied Spatial Analysis)	<b>Cambridge, MA</b> Aug 2019 to Aug 2022
<ul style="list-style-type: none"><li>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.</li><li>Developed and delivered spatial analysis recitations using QGIS, ArcGIS, Python, and CartoDB.</li><li>Class report and projects publication: <a href="https://cityform.mit.edu/projects/workshop-on-city-form">https://cityform.mit.edu/projects/workshop-on-city-form</a></li></ul>	
<b>New York University (NYU) Center for Urban Science and Progress (CUSP)</b> <i>Researcher</i>	<b>Brooklyn, NY</b> 2018-2019
Conducted high-fidelity human behavior studies at SimSpace, utilizing mixed sensing and simulation technologies.	
<ul style="list-style-type: none"><li>Investigated pedestrian movement through virtual reality data collection and applied machine learning to enhance urban planning and design.</li></ul>	

### TEACHING EXPERIENCE

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<b>National University of Singapore</b> <i>Adjunct Lecturer</i>	<b>Singapore</b> August 2024 to Present
<ul style="list-style-type: none"><li>Course Design and Lecturer for Graduate students in the Department of Architecture. Course title: “Artificial Intelligence in Urban Planning”</li></ul>	
<b>MITx PRO   Emeritus</b> <i>Learning Facilitator &amp; Lecturer</i>	<b>Hybrid</b> Jun 2021 to Jun 2024
<ul style="list-style-type: none"><li>Lectured for Data Engineering and Data Science courses for professionals.</li></ul>	

### PROFESSIONAL EXPERIENCE

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<b>Out of the Box Education, Inc.</b> <i>Co-Founder, CEO</i>	<b>Hybrid</b> 2021 to Present
<ul style="list-style-type: none"><li>Consumer EdTech Startup founded out of MIT (Techstars '21).</li><li>Raised Seed funding – Funded by Goodwater Capital, Rough Draft Ventures (by General Catalyst) + some other VC firms and Angels.</li><li>Ran a successful Kickstarter campaign in 2022 – exceeded funding goals in 5 minutes.</li><li>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.</li></ul>	

### **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**

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- 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**

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

### **TECHNICAL SKILLS**

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**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