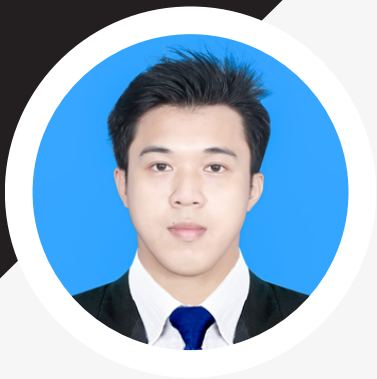

PLACK SOKHIT

Transport and Architectural Engineer

Motivated transport and architectural engineer with strong interest in sustainable urban design, mobility systems, and data-driven planning. Experienced in GIS analysis, infrastructure design, and environmental assessment.

097-725-88-25 Sokhit1@gmail.com

Confederation Boulevard, Teulada I commune, Toul Kork district, Phnom Penh

EDUCATION

Doctor of Philosophy (PhD) in Transport and Infrastructure Engineering
Institute of Technology of Cambodia (ITC) — 2025–Present

Master of Engineering in Transport and Infrastructure Engineering
Institute of Technology of Cambodia (ITC) — 2023–2024

Bachelor of Engineering in Architectural Engineering
Institute of Technology of Cambodia (ITC) — 2016–2021

SKILLS

Technical & Engineering Tools

- AutoCAD, Revit, SketchUp, Civil 3D, Lumion
- QGIS, ArcGIS Pro, Google Earth Engine (GEE)
- PTV VISSIM (Traffic Simulation)
- Google Earth, ENVI, Sentinel-5P Data Processing

Research & Analytical Skills

- Statistical Analysis (ANOVA, Regression, Correlation)
- Machine Learning (Random Forest, XGBoost, ANN)
- Spatial and Temporal Data Analysis
- Emission Estimation (Tier 1–3 Methods)
- Environmental Impact Assessment

Design & Visualization

- Architectural Drawing & Landscape Design
- Urban Mobility and Road Network Mapping
- Data Visualization & Infographics

Soft Skills

- Team Collaboration & Leadership
- Project Planning & Management
- Problem Solving & Critical Thinking
- Academic Writing & Presentation

Language : Khmer and English

EXPERIENCE

Research Assistant

Institute of Technology of Cambodia (ITC) **2023 – Present**

PO Box 86, Russian Federation Blvd., Sangkat Teuklaak 1, Khan Toul Kork, 120404, Phnom Penh, Cambodia

- Conducted multidisciplinary research on transport systems, air quality assessment, and sustainable urban mobility.
- Led data collection and spatial analysis of motorcycle emissions using sensors, QGIS, and Python-based modeling.
- Presented papers at the EASTS 2025 Conference and ITC Scientific Day, contributing to national discussions on urban air pollution.
- Supported graduate students in experimental design, regression analysis, and map visualization.

Graduate Researcher

Institute of Technology of Cambodia (ITC) **2023 – 2026**

PO Box 86, Russian Federation Blvd., Sangkat Teuklaak 1, Khan Toul Kork, 120404, Phnom Penh, Cambodia

- Designed and implemented emission estimation models (Tier 1–3) and semi-log regression for particle number concentration (PNC).
- Integrated GIS and meteorological data to assess exposure along Phnom Penh's road networks.
- Developed research frameworks for transport accessibility, built-up area growth, and bicycle infrastructure equity.

Publications

1. Assessing the Impact of Road Traffic Composition on Pedestrian Exposure to Air Pollution in Urban Areas.
   - Published and presented at EASTS 2025, Surakarta, Indonesia.
2. Motorcycle Emissions and Air Quality Assessment: A Case Study at the Institute of Technology of Cambodia (ITC)
   - Co-Author of Master's Thesis, 2023–2025. Published and presented at EASTS 2025, Surakarta, Indonesia and ITC Scientific Day 2025.
3. Weighting Approach for Assessing Walkability Index of Urban Streets: Case Study of Phnom Penh, Cambodia.
   - Published and presented at EASTS 2025, Surakarta, Indonesia.
4. Walkability and importance assessment of pedestrian facilities in Phnom Penh City. Techno-Science Research Journal.

Intern – Urban Planning and Architecture Division

Phnom Penh City Hall **2024-2025**

PO Box 86, Russian Federation Blvd., Sangkat Teuklaak 1, Khan Toul Kork, 120404, Phnom Penh, Cambodia

- Assisted in preparing urban zoning plans and transport network layouts.
- Produced visual maps and 3D concepts for public spaces and road corridor improvements.
- Collaborated with senior planners on sustainable mobility and parking management proposals.

Intern – Urban Planning and Architecture Division

Local Engineering Consultancy (Freelance) **2020 – 2022**

- Contributed to design documentation for small-scale infrastructure and building projects.
- Supported quantity estimation, CAD drafting, and architectural visualization using Revit and Lumion.