

LOUIS SUNGWOO CHO E.I.T

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EDUCATION

University of Illinois at Urbana–Champaign (UIUC)	Aug 2020 – May 2025
M.S. Civil Engineering (Transportation)	GPA: 3.46/4.00
B.S. (Honors) in Civil Engineering (Transportation), Minor in Computer Science	GPA: 3.55/4.00

LICENSES & CERTIFICATIONS

Engineer in Training (E.I.T), Civil Engineering	Oct 2025
Issued by National Council of Examiners for Engineering and Surveying (NCEES)	

RELEVANT EXPERIENCES

Autonomous Driving Simulation <i>Machine Learning, Python, CARLA, ROS, Gazebo</i>	May 2023 – May 2025
<ul style="list-style-type: none">Performed trajectory simulations of self-driving vehicles for traffic flow modeling, controls, and visualize trajectories.Collaborated in a team of 3 to refine safety of autonomous vehicles.	
IL 9 Road Design Improvement <i>Python, Bentley OpenRoads</i>	Jan 2024 – May 2024
<ul style="list-style-type: none">Performed horizontal and vertical geometric alignments for roadway design, applying AASHTO standards.Calculated grades and vertical curve parameters to ensure safety, visibility, and smooth driving conditions.Integrated Bentley OpenRoads with Python-based calculations to streamline alignment evaluation.	
Bus Rapid Transit (BRT) Feasibility Planning <i>Python, Planning, Optimization, Data Analysis</i>	Jan 2023 – Mar 2023
<ul style="list-style-type: none">Conducted a feasibility study for a proposed Bus Rapid Transit (BRT) system in Champaign–Urbana.Applied optimization models and Python programming to estimate boarding and alignment passengers, and assess potential improvements in travel efficiency during transit planning.	
University of Illinois Traffic Impact Analysis Study <i>HCS, Planning, Data Analysis</i>	Oct 2022 – Dec 2022
<ul style="list-style-type: none">Collected and analyzed traffic data at five UIUC intersections to assess 2024 traffic impact.Modeled LOS and delays using HCS; incorporated growth, trip generation, and rerouting scenarios.Recommended low-cost geometric and signal timing changes to improve intersection performance.	

LEADERSHIP & SERVICE

Institute of Transportation Engineers (ITE@UIUC)	Aug 2022 – May 2025
<i>President, Graduate Student Rep, Council Representative</i>	<i>Urbana, IL</i>
<ul style="list-style-type: none">Led chapter growth, increasing event participation by 60%; organized industry panels on ITS and CAVs; directed a transit ridership analytics project (Top 3 Award out of 200+ at UIUC EOH); volunteered for engineering council; and contributed to case study on High-Speed Rail (Chicago–St. Louis).	

AWARDS

Charles E. DeLeuw Scholarship – Urban Transit Systems Travel Abroad	Mar 2025
UIUC Engineering Open House – Outstanding Exhibit, <i>3rd Place</i>	Apr 2024
Grant W. Shaw Scholarship – Leadership in Traffic Engineering	Mar 2023

SKILLS

Programming: Python, Java, C++, HTML/CSS/JavaScript, ReactJS
Transportation/Simulation: ROS, CARLA, Gazebo, HCS
Tools: Git, Cloud, Docker, LaTeX, Bentley OpenRoads, AutoCAD, Revit
Languages: English, Korean