Xinyuan LIANG

HYDROLOGY & WATER RESOURCES ENGINEERING

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Summary

Motivated undergraduate student in Hydrology and Water Resources Engineering (Top 3%). Equipped with substantial work experience in environmental research and ESG consulting, combining strong research capabilities, engineering skills, and creative problem-solving. An effective communicator and collaborator, dedicated to promoting sustainability and environmental protection.

Professional Experience

Mar 2025 - Jun 2025	Consulting Intern, Zerenyun (Beijing) Holding Group Co., Ltd. Snangna	i (Remote)
	Orchestrated ESG report and framework development for 10+ state-owned enterprise	es across
	diverse sectors.	
Sep 2024 - Feb 2025	ESG Consulting Assistant, Shanghai Boxu Mingguan Technology Co., Ltd.	Shanghai
	Analyzed data for a carbon footprint tool to evaluate urban road lighting systems.	
Jul 2024 - Aug 2024	Environmental Project Intern, Chinese Research Academy of Environmental Sciences	Beijing
	Processed 2022-2023 surface water data (13 indicators, 3000+ points/station) for 88	stations
	across 11 cities using Python	

Field Practices

Jun 2025

Mar 2025 Jun 2025

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	Conducted hydrogeological mapping and prepared water table contour maps.	
Jun 2024	Hydrological Station Practice	Yichun
	Operated data measurement instruments in field hydrology.	
Sep 2023	Engineering Surveying Practice	Harbin
	Surveyed 20+ sites with a total station and created CAD-based elevation maps.	
Jun 2023	Geological Practice in the Liujiang Basin	Qinhuangdao
	Documented 10+ types of rock formations through field observation.	

Daging

Comprehensive Groundwater Practice

Publications

Apr 2025	Co-author, "Understory Vegetation Regulated the Soil Stoichiometry in Cold-Temperate Larch
	Forests", Plants-Basel (JCR Q1, IF=4)

Research Experience

Apr 2025 - May 2025	Design of a Novel Iron-Based Wastewater Treatment Unit
	Developed a prototype industrial wastewater treatment device with iron recovery functionality.
Jun 2024 - Jun 2025	Spatiotemporal Patterns and Driving Factors of Regional Precipitation Use Efficiency
	Modeled precipitation use efficiency using GIS and identified environmental driving factors.
May 2024 - Jul 2024	Study on Numerical Simulation of Groundwater
	Built a 3D groundwater model to map flow fields and water level distribution.
Jan 2024 - present	Spatiotemporal Variability and Driving Factors of Precipitation in the Guangdong-Hong
	Kong-Macao Greater Bay Area from 1901 to 2020, and Analysis of Extreme Precipitation

- Analyzed trends, cycles, and abrupt changes in 120 years of precipitation data for the Greater Bay Area using the Hurst test, wavelet analysis, and Mann-Kendall test.
- Used wavelet coherence to study the impact of seven meteorological factors on precipitation, including sunspots and ENSO.
- Applied the geographic detector model to analyze the influence of driving factors such as topography, vegetation, soil, and human activities on precipitation.

Sep 2023 - May 2024

Characteristics of Rhizosphere Soil Carbon and Nitrogen in Predominant Tree Species of the Xiaoxing'an Mountains

Compared rhizosphere vs. non-rhizosphere soil C & N content across four tree species.

Jun 2023 - Jun 2024

Analysis of Precipitation Characteristics and Prediction in the Sanjiang Plain
Utilized OCA, Kendall's Rank Correlation Method, and the Run Test to analyze regional precipitation characteristics.

Education

Sep 2022 - present

Heilongjiang University

B.Eng. in Hydrology & Water Resources Engineering

GPA: 89.1/100 | Ranking: Top 3% | IELTS: 7 (R8.5, L7.5, W6.5, S6)

Extracurricular Activities

May 2025 - present	Tennis Player Heilongjiang University Tennis Team
Jun 2024 - Jun 2025	Head of the Competition Department Football Association
Jun 2023 - Jun 2024	Head of HR International Youth Fellowship
Sep 2022 - Sep 2023	Member of the Activities Department Youth Volunteers Association
Sep 2022 - Jun 2023	Soccer Player Heilongjiang University Women's Soccer Team

Honors & Awards

Dec 2023	Outstanding Student Heilongjiang Province
Oct 2023	Outstanding Volunteer Youth Volunteer Association
Sep 2023	Second Prize Northeastern China Mathematical Modeling Competition
Aug 2023	Silver Award Heilongjiang Province division of the China International "Internet+" College
	Student Innovation and Entrepreneurship Competition
2023 - 2024	First-Class Comprehensive Scholarship Heilongjiang University (only for the top 5% students
2022 - 2023	every year)

S Award | Mathematical Contest in Modeling (MCM) in the United States

Skills

Feb 2024

Technical Skills	GIS, AutoCAD, Origin, SPSS, GIVIS, Construction surveying instruments
Certifications	LEED Green Associate (U.S. Green Building Council), National Level 3 Football Referee
	(Chinese Football Association)
Languages	Chinese (native), English (fluent), French (DELF B1 in preparation)
Others	Guzheng (Grade 7), Photography (www.liangxinyuan.world)