

# Minghan(Loren) Li

✉ lorenlmh@uw.edu

🌐 GitHub Profile

University of Washington

☎ +1-(959)2565508

🌐 LinkedIn Profile

## EDUCATION

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- **Hamden Hall Country Day School** 2023.09 – 2025.06  
*High School Diploma* CGPA/Percentage: 4.139
- **University of Washington** 2025.09 – 2029.06  
*Intended Major: Chemistry/Biology* CGPA/Percentage: in-progress

## RESEARCH & SCIENTIFIC EXPERIENCE

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- **Study on Atmospheric Reactive Nitrogen Deposition in China** 2024  
*Research Intern, China Agricultural University (Mentor: Prof. Zhenling Cui)*
  - Assisted with sample collection and laboratory analysis of reactive nitrogen (Nr) in air and rainwater in multiple types of land-use.
  - Supported data processing for atmospheric Nr deposition fluxes and PM2.5 characteristics; contributed to the evaluation of the effectiveness of emission-control before the Beijing Parade.
  - Participated in basic laboratory procedures in soil and environmental chemistry, including sample preparation and instrument-assisted measurements.
- **Biochar-Enhanced Microbial Removal of Antibiotics** 2024 – 2025  
*Research Intern, Hunan Agricultural University (Mentor: Prof. Zhibin Wu)*
  - Investigated biochar-enhanced microbial systems for removal of antibiotic contaminants from environmental systems.
  - Examined interactions between biochar materials, microbial activity, and degradation efficiency.
  - Contributed to research addressing antibiotic pollution and antimicrobial resistance.
- **Industrial Wastewater Treatment and Environmental Monitoring** 2025  
*Field Study Experience*
  - Monitored ammonia nitrogen levels in industrial wastewater and observed standardized water sampling procedures.
  - Evaluated desulfurization tower treatment by measuring pH and density of limestone slurry for regulatory compliance.
  - Studied wastewater purification processes including chemical treatment, sedimentation, filtration, and heavy metal sludge disposal.
  - Gained exposure to environmental pollution control practices and industrial water quality management.
- **CarbonTrack: Carbon Footprint Tracking & Credit Platform** 2024 – Present  
*Founder & Product Designer*
  - Created a carbon accounting platform that enables users to monitor emissions and incentivizes carbon reduction through carbon credits.
  - Designed user interfaces and product workflows to encourage measurable sustainable lifestyle changes.
  - Led development of a mobile app to expand accessibility and promote climate-conscious habits.
  - Scaled from a high school environmental initiative into an ongoing climate technology project.

## PUBLICATIONS & HONORS

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- **Li, M.** et al. (2025). Targeted regulation of biochar-strengthened microorganisms for effective removal of antibiotics from the environment. *Clean Technologies and Environmental Policy*, 27, 7467–7490.  
<https://doi.org/10.1007/s10098-025-03271-0>
- **Li, M.** (2024). A probe into the commercial value of the non-heritage project of small dragon performing. *Academic Journal of Business & Management*. <https://doi.org/10.25236/AJBM.2024.060602>
- “Most Beautiful Volunteer” Honoree, Changde Municipal Government (100 people in total, the only high school student), 2023.
- National Gold Honor in Public Service Announcement in HOSA Regional Level, HOSA Future Health Professionals, team’s score is higher than the National top 25%, 2024.

## ACADEMIC & COMMUNITY ENGAGEMENT

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- **Founder & Product Lead** *CarbonTrack Climate Technology Initiative* 2024 – Present
  - Led development and outreach of a digital carbon tracking platform promoting sustainable behavior.
  - Coordinated student contributors and expanded community engagement.
- **Environmental Protection Volunteer** *Dongting Lake Wetland Conservation* 2024
  - Organized waste cleanup and recycling outreach in wetland communities.
  - Promoted environmental awareness and sustainable practices among local residents.
- **Core Member** *Model United Nations Club* 2022
  - Participated in international policy debates and supported training for new members.

## TECHNICAL SKILLS AND INTERESTS

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**Languages:** Mandarin (native), English (fluent)

**Programming:** Python, Java

**Tools:** VS Code, Figma (UI/UX design), LaTeX, Excel

**Areas of Interest:** Chemistry, Biology, Pharmaceutical