

Allie (Minh-Anh) Nguyen

@ allienguyen@berkeley.edu | ☎ +1 510 255 5038 | [linkedin.com/in/alliemnguyen](#)

EDUCATION

University of California, Berkeley (UCB) <i>Ph.D. in Environmental Engineering — GPA: 4.00/4.00</i> <i>M.S. in Environmental Engineering</i>	Berkeley, CA <i>Aug 2022 – May 2027 (Expected)</i> <i>Aug 2023 – Dec 2023</i>
University of Minnesota - Twin Cities (UMN) <i>B.Eng in Environmental Engineering</i>	Minneapolis, MN <i>Aug 2018 – May 2022</i>

RESEARCH EXPERIENCE

University of California, Berkeley <i>Graduate Student Researcher</i> <i>Project: Pandemic Readiness and Equity through Virus Epidemiology of Wastewater (PREViEW)</i>	Berkeley, CA <i>Aug 2022 – Present</i> <i>Aug 2022 – Present</i>
<ul style="list-style-type: none">Studying the persistence of viral nucleic acid signals of 8 human respiratory viruses in wastewater in presence of surfactants.Conducting research to advance the understanding of how sub-sewershed sampling can contribute to efforts to improve health equity, with the focus on sub-sewersheds of San Francisco.Mentor junior research assistants in the lab.	
<i>Project: Supplementing conventional drinking water with distributed sources of purified municipal wastewater</i>	<i>Oct 2025 – Present</i>
University of Minnesota - Twin Cities <i>Undergraduate Research Assistant</i> <i>Project: Biochar for Nutrient Removal from Municipal Wastewater (Behrens' Lab)</i>	Minneapolis, MN <i>Jan 2021 – Aug 2022</i> <i>Sep 2021 – Aug 2022</i>
<ul style="list-style-type: none">Operated and prepared wastewater media for sequencing batch reactors.Analyzed nitrate, nitrite, and ammonium using segmented flow analysis and UV-Vis spectrophotometry to characterize nutrient removal capacities of biochar.	
<i>Project: Hydrologic and Hydraulic Characteristics of Effective Sea Lamprey Barriers</i>	<i>Jan 2022 – May 2022</i>
<ul style="list-style-type: none">Conducted literature review on the efficacy of current sea lamprey barrier technologies.Designed and performed fluid mechanics experiments with model barriers in hydraulic flumes.Analyzed the time-averaged and root-mean-square velocities of the water flow due to barriers' impact, lamprey detachment forces, and turbulent kinetic energy from the experiment results.	
<i>Project: Determination of Biomethane Generation Potential in the Domestic Municipal Waste Flow of Hanoi, Vietnam</i>	<i>Jan 2021 – Nov 2021</i>
<ul style="list-style-type: none">Sampled organic municipal waste, conducted calculations based on the samples' waste composition, and performed biochemical methane potential tests on a sample of organic matters resembling the above waste to measure its anaerobic digestion capability.	

PRESENTATIONS & PUBLICATIONS

Presentations

- Nguyen, Allie (Minh-Anh); Nelson, Kara.** *Persistence of viral nucleic acid signals in the presence of surfactants in wastewater.* Gordon Research Conference 2025 "Microbes in Built Environments", June 21-27, 2025, Waterville Valley, New Hampshire, USA. Poster Presentation.
- Nguyen, Allie (Minh-Anh); Nguyen, Viet-Anh.** *Pretreatment of Organic Waste and Sewage Sludge for Biogas and Methane Production Improvement in Anaerobic Digestion in Hanoi, Vietnam.* IWA World Water Congress & Exhibition, August 11-15, 2024, Toronto, Canada. Poster Presentation.
- Nguyen, Allie; Tschirner, Ulrike.** *Determination of Biomethane Generation Potential in the Domestic Municipal Waste Flow of Hanoi, Vietnam*. Fall Virtual Undergraduate Research Symposium 2021, University of Minnesota, 27 November 2021, Minneapolis, Minnesota. Poster Presentation.

Publications

- Article: Audrey Liwen Wang, Minxi Jiang, **Allie Nguyen**, Staci Kane, Monica Borucki, Rose Kantor, Kara Nelson, *Benchmarking Concentration and Extraction Methods for Wastewater-Based Surveillance of Eight Human Respiratory Viruses: Implications for Rapid Application to Novel Pathogens*, Environmental Science & Technology, 2025 59 (36), 19107-19118, DOI: 10.1021/acs.est.4c13635

- Article: Viet-Anh Nguyen, Thi Minh Thanh Vu, **Minh-Anh (Allie) Nguyen**, Viet Minh Nguyen, *Can COVID-19 disease be transmitted in water environment?* (in Vietnamese). J. Environment and Cities, Vietnam Association of Urban and Industrial Environment, 2021. ISSN 1859–3623, Vol.131, pp. 36–42.
- Report: *National Strategy for Rural Clean Water Supply and Sanitation for the period to the year 2030, vision to 2045*. Consultancy work, prepared for the Vietnamese Ministry of Agriculture and Rural Development, funded by UNICEF. 2021.
- Report: Viet-Anh Nguyen, Nguyen Duong Quang Chanh, Vu Manh Cuong, **Minh-Anh (Allie) Nguyen** et al., *Study on the implementation of low and no-cost options in three wastewater treatment plants, Vietnam* (Project No. 1000052). IESE, for the United Nations Industrial Development Organization (UNIDO) and Vietnamese Ministry of Planning and Investment (MPI), Contract No. 3000070422. March–August 2019

WORK EXPERIENCE

University of California, Berkeley

Berkeley, CA

Graduate Student Instructor – Department of Civil and Environmental Engineering

Jan 2025 – May 2025

- Course: CE 211B – Environmental Biological Processes (Spring 2025 semester, 35 graduate students)
- Graded weekly homework assignments and exams.
- Held weekly office hours to support student learning.
- Led exam review sessions to reinforce key concepts, provide example problems, and enhance student comprehension.
- Collaborated with course instructor to revise assignments and grading rubrics.

SURF Graduate Student Mentor – Office of Undergraduate Research and Scholarships

Jan 2023 – Aug 2023

- Led draft proposal workshops and weekly office hours for applicants of the Summer Undergraduate Research Fellows (SURF) program.
- Hosted 2 summer workshops on research skills with an attendance of 50 SURF fellows.
- Organized and facilitated the SURF program's orientation, weekly small group meetings, and students' final presentations.

University of Minnesota - Twin Cities

Minneapolis, MN

Peer Tutor Mentor – SMART Learning Commons, UMN Libraries

Sep 2019 – May 2022

- Assisted over 100 students' learning inquiries in Math and Chemistry.
- Observed and evaluated 12 SMART peer tutors with 1-on-1 consultation sessions and written reports.
- Led a 60-minute staff meeting every semester for additional training of peer tutors.

Undergraduate Teaching Assistant – College of Science and Engineering

Sep 2021 – May 2022

- Graded assignments for 60 students in CEGE 3101 (Computer Applications I) and CEGE 3501 (Introduction to Environmental Engineering).
- Prepared, taught, and managed class logistics for 30 students in CSE 1001 (First-year Experience).

International Student Consultant – International Student and Scholar Services

May 2021 – Aug 2021

- Assisted 80 incoming international students during orientation and before their US arrival.
- Provided logistical support to the CSE Academic Advising office in facilitating activities and preparing for orientation.

Hanoi University of Civil Engineering

Hanoi, Vietnam

Environmental Engineering & Management Intern

May 2019 – Jan 2021

- Participated in preparation of five environmental engineering research papers, manuals, and reports.
- Contributed to environmental management consultancy contracts of Institute of Environmental Science and Engineering, Hanoi University of Civil Engineering
- Participated in site visits to wastewater treatment plants, clients' factories, and contaminated sites. Conducted field surveys of municipal waste management.

AWARDS & ACHIEVEMENTS

- UC Berkeley, The Trussell Fellowship in Environmental Engineering 2022-2023
- University of Minnesota, College of Science and Engineering Dean's List 2018-2021
- University of Minnesota, Department of Civil, Environmental and Geo- Engineering James and Sharon Weinel Chi Epsilon Scholarship 2021-2022
- University of Minnesota, International Student and Scholar Services Culture Corps Program Scholarship 2021
- University of Minnesota, Undergraduate Research Opportunities Program Scholarship 2021
- University of Minnesota, Department of Civil, Environmental and Geo- Engineering Adolph Sommerfeld Scholarship 2020
- University of Minnesota, Global Excellence Scholarship 2018-2022

SKILLS

- Laboratory:** Digital PCR, DNA/RNA extraction, UV–Vis spectrophotometry, cell culture, sequencing batch reactor operation, water chemistry analysis (alkalinity, hardness, microbial level, COD/BOD concentrations).
- Software:** R/RStudio, Markdown, MATLAB, Microsoft Excel.
- Languages:** Vietnamese (native proficiency), English (bilingual proficiency).
- Certifications:** Master Certified Tutor (CRLA Level 3).

LEADERSHIP AND OUTREACH

University of California, Berkeley

- Beyond Academia *2023-Present*
 - Logistics Co-director (2024-Present):
 - * Oversee logistics for all events, including the Beyond Academia conference with 650+ attendees from over 20 countries.
 - * Serve as the main contact for external partners, including UC Berkeley Graduate Division, Graduate Professional Development, and Berkeley Career Engagement.
 - * Lead meetings with members and co-directors, setting event logistics frameworks.
 - Finance Co-director (2024):
 - * Managed a \$70,000+ for Beyond Academia, a non-profit student-led organization.
 - * Co-directed and managed a team of 10+ volunteers
 - * Organized, recruited guest PhD speakers, and moderated panels for the annual Beyond Academia conference (1,300+ attendees).
- Graduate Women of Engineering *2022-Present*
 - Co-president (2024-Present)
 - Career and Professional Development Committee Head (2023-2024): Organized the annual Career Panel, Speaker Series, and other professional development events for women-identifying engineering graduate students at UC Berkeley.

University of Minnesota – Twin Cities

- American Society of Civil Engineers *Historian (2021-22)*
- CSE International Ambassadors *President (2021-22), Vice President (2020-21), Secretary (2019-20)*
- Chi Epsilon Honors Society *Vice President (2021-22)*
- Design U *Research and Strategy Team Member (2021)*
- Welcome Week Program *Welcome Week Leader (2020)*