Allie (Minh-Anh) Nguyen

@ allienguyen@berkeley.edu | +1 612 295 2636 | linkedin.com/in/alliemnguyen | github.com/alliemnguyen |

Education

University of California, Berkeley — Berkeley, CA
Ph.D. in Environmental Engineering — *Aug 2022 – May 2027 (Expected)*
M.S. in Environmental Engineering — *Aug 2023 – Dec 2023 (Expected)*

University of Minnesota - Twin Cities — Minneapolis, MN
B.Eng in Environmental Engineering — GPA: 3.81/4.00 — *Aug 2018 – May 2022*

Skills

Laboratory: Digital PCR, water sample collection, UV–Vis spectrophotometry, sequencing flow analysis, sequencing batch reactor operation, water chemistry analysis (alkalinity, hardness, microbial level, COD/BOD concentrations).

Software: MATLAB, Microsoft Excel.

Research Experience

University of California, Berkeley — Berkeley, CA

Project: Pandemic Readiness and Equity through Virus Epidemiology of Wastewater (PREViEW) — *Aug 2022 – Present*

- Conduct research on forms of viruses and their persistence with regards to various environmental factors (such as surfactants, temperature, and ammonia) in wastewater.
- Perform experiments to evaluate and compare methods of nucleic acid extraction and concentration from wastewater.
- Mentor undergraduate research assistants in the lab.

University of Minnesota - Twin Cities — Minneapolis, MN

Undergraduate Research Assistant

Project: Biochar for Nutrient Removal from Municipal Wastewater (Behrens' Lab) — *Sep 2021 – Aug 2022*

- 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.

Project: Hydrologic and Hydraulic Characteristics of Effective Sea Lamprey Barriers — *Jan 2022 – May 2022*

- 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.

Project: Determination of Biomethane Generation Potential in the Domestic Municipal Waste Flow of Hanoi, Vietnam — *Jan 2021 – Nov 2021*

- 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.

Work Experience

Institute of Environmental Science and Engineering (IESE)(HUCE) — 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 IESE, Hanoi University of Civil Engineering (HUCE)
- Participated in site visits to wastewater treatment plants, clients' factories, and contaminated sites. Conducted field surveys of municipal waste management.

Office of Undergraduate Research (UC Berkeley) — Berkeley, CA

SURF Graduate Student Mentor — *Jan 2023 – Aug 2023*

- Led draft proposal workshops and weekly office hours and 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 footnotesize group meetings, and students' final presentations.

SMART Learning Commons, University of Minnesota Libraries (UMN) — Minneapolis, MN

Peer Tutor Mentor — *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.

College of Science and Engineering (UMN) — Minneapolis, MN

Undergraduate Teaching Assistant — *Sep 2021 – May 2022*

- Graded assignments for CEGE 3101 (Computer Applications I) and CEGE 3501 (Introduction to Environmental Engineering).
- Prepared and presented teaching materials with the instructor, and managed class logistics for CSE 1001 (First-year Experience).

International Student Consultant — *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.