Allie (Minh-Anh) Nguyen

@ allienguyen@berkeley.edu | 🛘 +1 510 255 5038 | 🛅 linkedin.com/in/alliemnguyen | 🖸 github.com/alliemnguyen |

EDUCATION

University of California, Berkeley

Berkeley, CA

Ph.D. in Environmental Engineering — GPA: 4.00/4.00

Aug 2022 - May 2027 (Expected)

M.S. in Environmental Engineering

Aug 2022 - Dec 2023

University of Minnesota - Twin Cities

Minneapolis, MN

B.Eng in Environmental Engineering

Aug 2018 - May 2022

Work Experience

University of California, Berkeley

Berkeley, CA

Graduate Student Researcher

Project: Pandemic Readiness and Equity through Virus Epidemiology of Wastewater (PREViEW)

Aug 2022 - Present

- Conduct research on different forms of 8 viruses and their decay in the presence of surfactants 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.

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.

Office of Undergraduate Research, UC Berkeley

Berkeley, CA

SURF Graduate Student Mentor

Jan 2023 - Aug 2023

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

SMART Learning Commons, University of Minnesota Libraries

Minneapolis, MN Sep 2019 – May 2022

 $Peer\ Tutor\ Mentor$

- 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, University of Minnesota

Minneapolis, MN Sep 2021 – May 2022

Undergraduate Teaching Assistant

- Graded assignments for 60 students in CEGE 3101 (Computer Applications I) and CEGE 3501 (Introduction to Environmental Engineering).
- $\bullet\,$ Prepared, taught, and managed class logistics for 30 students in 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.

SKILLS

Laboratory: Digital PCR, DNA/RNA extraction, UV-Vis spectrophotometry, sequencing flow analysis, sequencing batch reactor operation, water chemistry analysis (alkalinity, hardness, microbial level, COD/BOD concentrations).

 ${\bf Software:}\ \ {\bf R}/{\bf RStudio},\ {\bf R}\ {\bf Markdown},\ {\bf MATLAB},\ {\bf Microsoft}\ {\bf Excel}.$