

Zachary Kwon

contact	✉ zk49@cornell.edu	in linkedin.com/in/zachary-kwon
objective	Dependable and inquisitive Chemical Engineering undergraduate who can quickly adapt to different working environments and has a passion for pursuing R&D, data analysis, and process design	
education	Cornell University , Ithaca, NY B.S. in Chemical Engineering August 2021 – May 2025 GPA: 3.92/4.00 Thomas Jefferson High School for Science and Technology , Alexandria, VA STEM-oriented pathway August 2017 – May 2021 GPA: 4.52/5.00	
coursework * = in progress	Product Design and Lean Manufacturing*, Bioprocess Engineering*, Thermodynamics*, Heat and Mass Transfer*, Fluid Mechanics, Chemical Process Design and Analysis, Physical Chemistry II for Engineers, Honors Physical Chemistry I, Honors Organic Chemistry I	
experience	Arcadis , Arlington, VA <i>Water Resources Intern</i> May 2023 – August 2023 <ul style="list-style-type: none">Utilized Bluebeam Revu to markup Operations and Maintenance manuals sent by contractors like Orders Construction for thorough review to ensure contract requirements and deadlines were metConducted field work at Henry Sliwinski Water Treatment Plant by communicating client (Frederick Water) needs to on-site contractorsPresented capstone presentation to supervisor, Area Leader, team members, and university recruiters at end of internship AguaClara Cornell , Ithaca, NY <i>Subteam Project Lead</i> January 2022 – present <ul style="list-style-type: none">Project: Constructing system to analyze effectiveness of adding clay and/or powdered activated carbon in dissolved organic matter removal for water treatment plants located in Central AmericaDeveloped automated pump and turbidimeter code with ProCoDA softwareWrote Python scripts to calculate flow rates necessary to vary system concentrations of clay, activated carbon, humic acid, and coagulantCompiled multiple 5,500+ word reports and led presentations at end-of-year research symposiums to 45+ peers and advisors Cornell University Smith School of Chemical Engineering , Ithaca, NY <i>Undergraduate Research Assistant @ Yue Lab</i> September 2023 – present <ul style="list-style-type: none">Project: Performing classical molecular dynamics simulations of water and ions in CNTs and confined graphene sheets to compute water and ion density with LAMMPS software and Python Cornell University , Ithaca, NY <i>Undergraduate Teaching Assistant</i> August 2022 – December 2022 <ul style="list-style-type: none">UTA for PHYS 1112: Physics I, Mechanics and Heat. Enrollment was roughly 250 students.Assisted in two one-hour cooperative learning sessions per week, helping students work through discussion problems and course contentParticipated in weekly staff meetings and seminars on teaching development for physics instruction Virginia Pool Services, Inc. , Haymarket, VA <i>Summer Pool Lifeguard</i> June 2022 – August 2022 <ul style="list-style-type: none">Received Red Cross Deep-Water Lifeguard Certification and worked as a lifeguard at three community pools for 37.5+ hours per week performing hourly chemical checks, coordinating schedules, and enforcing safety rules Thomas Jefferson High School for Science and Technology , Alexandria, VA <i>Student Researcher</i> August 2020 – May 2021 <ul style="list-style-type: none">Worked remotely with lab director Brian Kennedy to integrate 11 ideas, provide procedures, and keep lab notes for UV/Vis Spectroscopy project manual; presented final product to virtual audience	
skills	Minitab, DFMEA, Python, Java, ProCoDA, LAMMPS, Bluebeam Revu, UV/Vis Spectroscopy	
honors & awards	Engineering Dean's List Awarded to students maintaining above a 3.5 GPA. On track to graduate with honors	All Semesters