JASON X. KANG

(404) 702 - 3798 • Atlanta, GA jason.xy.kang@gatech.edu • linkedin.com/in/j-kang/

EDUCATION

Georgia Institute of Technology

Atlanta, GA

B.S. in Chemical & Biomolecular Engineering. Minors in Mathematics and Engineering & Business. Thomas L. Gossage International Enrichment Scholarship Recipient.

May 2023 GPA: 3.92

EXPERIENCE

Researcher

HP Inc. Micro-Electromechanical Systems Research & Development Intern Corvallis, OR

May 2021 – August 2021

Atlanta, GA

Thermodynamics II Undergraduate Course Assistant

January 2021 -

- Assisted Dr. Carson Meredith in running 2 lectures a week and assessing the learning of 85 undergraduate students.
- Held weekly office hours to help students understand course content and complete assignments.

School of Chemical & Biomolecular Engineering, Georgia Institute of Technology

Sievers Lab, Georgia Institute of Technology

Atlanta, GA

January 2020 -

- Examined depolymerization of model lignin monomers such as benzyl phenyl ether by nickel supported silica catalysts undergoing mechanocatalytic hydrogenolysis as an abundant source of natural aromatic carbon.
- Explored optimization of alkaline and acid-catalyzed depolymerization of polyethylene terephthalate for plastic reclamation.
- Collected and interpreted IR data of catalytic products to determine nature of surface-adsorbed substances and HPLC & UV-Vis data of post-depolymerization samples of PET to determine chemical composition and percent yield of terephthalic acid.
- Investigated green production processes of phenol derivative active pharmaceutical ingredients such as acetaminophen, aspirin, and β -lactam antibiotics for a review publication proposing repatriation in the midst of the COVID-19 outbreak.

McAuley Aquatic Center

Atlanta, GA

Supervisor, Instructor, & Ambassador

September 2019 -

- Supervised shifts of lifeguards through daily operations & maintenance of an Olympic swimming pool & dive well and preparation for such events ranging from youth swim meets to the US Open.
- Instructed classes of up to 20 new hires according to the American Red Cross lifeguarding curriculum as well as facility safety and maintenance protocols to expand the roster of well-trained lifeguard staff.
- Conducted weekly lifeguard workouts to maintain and sharpen 80 employees' physical fitness and lifesaving abilities.
- Collaborated with fellow student leaders to improve recruitment and retention while interviewing potential new employees.

Shanghai American School, Pudong Campus

Shanghai, China

Researcher

August 2018 - November 2018

- Researched, acquired, and tested the effects of wet acid deposition on O335 rebar reinforced C30 Portland Cement Concrete.
- Analyzed porosity, brittleness, & other damage factors of construction materials exposed to varying levels of acid corrosion.
- Gathered air pollution & precipitation data for the Shanghai metropolitan area to predict detrimental effects to structural integrity of PCC complexes using a self-constructed model.

SKILLS & ACCREDITATIONS

Fluent in English, French, & Mandarin. Proficient in Spanish. Languages:

Technology: Programming, Data Science, and Simulation (Java, JavaScript, HTML5, CSS3, MATLAB, Python, R, Aspen Plus).

Computer Assisted Design (CAD) (Autodesk Inventor, Blender, Solidworks, Fusion 360).

Laboratory Analysis (Infrared (IR) Spectroscopy, High Performance Liquid Chromatography (HPLC)).

Certifications: Intermediate Safety and Chemical Engineering Education (2020, American Institute of Chemical Engineers).

EXTRACURRICULARS

SMILE: Committee Director

January 2021 -

- Led committees of peers in organizing campus events to improve student morale.
- Coordinated with campus departments such as housing and other student organizations to better connect the community.

Chemical & Biomolecular Engineering Ambassadors

February 2021 -

Represented the chemical engineering department to potential students and visitors through panels, tours, and other events. Additional Involvements: Delta Chi Fraternity (Scholarship Chair), Georgia Tech Swim Club