

ISHITA KUMAR

(404)539-6310 · ikumar6@gatech.edu · linkedin.com/in/ishita-kumar · https://ishitak.com

EDUCATION

Georgia Institute of Technology August 2021 — May 2026
PhD Candidate in Bioengineering

The Hong Kong University of Science and Technology September 2017 — May 2021
Chemical and Biomolecular Engineering Cumulative GPA 3.953/4.300

PROFESSIONAL EXPERIENCE

Teaching Assistant, HKUST September 2020 — December 2020

- For CENG1600: Biotechnology and its Business Opportunities
- Held office hours to help students with course assessments, with a focus on explaining biological concepts

Research Intern, HKUST June 2020 — August 2020

- Used shotgun proteomics technique to study the differentially expressed proteins in persister and resuscitated *E. coli* cells
- Analyzed the data using advanced bioinformatic tools
- Wrote a research paper identifying possible metabolic pathways required for persister resuscitation

Research Intern, HKUST June 2019 — August 2019

- Mimicking membraneless organelles found within cells using the phenomenon of liquid-liquid phase separation (LLPS)
- Wrote a literature review covering the definition, function, formation, and future scope of membraneless organelles
- Suggested analytical methods to identify whether LLPS has occurred in laboratory experiments

Research Intern, Indian Institute of Technology, Bombay May 2018 — August 2018

- Continued studying the degradation of photovoltaic cells' encapsulate, this time by conducting regular experiments with encapsulate additives as a variable
- Focused on quantifying the degradation observed and analyzing the data

LEADERSHIP EXPERIENCE

Engineering Student Ambassador, HKUST September 2019 — Present

- Represent the HKUST School of Engineering at events such as Info Day and other recruitment events
- Mentor students who are considering pursuing engineering

Team Captain, Chem-E-Car, HKUST AIChE June 2019 — November 2019

- Created a miniature car that can travel up to 30 meters with weights using a chemical battery and a specialised braking mechanism
- Lead the university team for the international AIChE Annual Chem-E-Car Competition 2019 in Orlando, Florida

Vice President, HKUST AIChE September 2018 — September 2020

- Organize events for Chemical Engineering students to give insight about the field and for professional development
- Manage the executive committee and handle marketing and communication

Deputy Head Student Ambassador, HKUST January 2018 — Present

- Represent HKUST in college fairs, high schools, and undergraduate recruitment
- Mentor current and new Student Ambassadors

Project Lead, HKUST Sustainable Campus Leadership Program August 2017 — May 2018

- Designed a prototype of an aquaponics plant
- Pitched our project to HKUST professors and potential sponsors

SKILLS

Software Microsoft Office Suite, Microsoft Excel, MATLAB, ASPEN, STRING, Comet MS/MS, ProteoWizard
Languages English and Hindi (Native); French (Intermediate); Mandarin (Basic)

AWARDS

HKSAR Government Scholarship of HKD80,000 November 2020
HKSAR Reaching Out Award May 2020
AIChE Outstanding Student Chapter Award November 2019
Awardee at the Ceremony Honoring Students' Academic Excellence April 2019
HKUST's Scholarship for Continuing Undergraduate Students of HKD10,000 May 2018, 2019
HKUST Sustainable Campus Leadership Award May 2018
Dean's List (4/5 semesters)