

Shweta Burgula

Enthusiastic student dedicated to intellectual and interpersonal growth.

shweta.burgula@gmail.com
908-432-3127
linkedin.com/in/shwetaburgula
www.shweta.dev

Education

Rensselaer Polytechnic Institute

B.S. in Chemical and Biological Engineering. Minor in Psychology. GPA: 3.43.

May 2022

Professional Experience

Intern at Genentech (10 hours/week)

May 2021-Present

- Designed a Tableau dashboard to track chromatography instrument performance and ensure system suitability.
- Contributed to a python script to automatically alert failed instrument system suitability.

Tutoring, Independent/Advising Center (10 hours/week)

Aug 2015 - Present

- Mentoring students of all ages and socioeconomic backgrounds.
- Regularly develop and teach complete curriculums for computer science, robotics, K-12 math, physics.
- Specialty in motivating and assisting underachieving students to excel.

Help Desk IT Consultant (5 hours/week)

Jan 2020 - Present

- Client-facing role to assist students by troubleshooting technical issues and communicating effectively. Used a ticketing system to store data and create requests.

Research Experience

Undergraduate Research Assistant at Zha Labs (6 hours/week)

Aug 2020 - Present

- Utilize molecular dynamics (LAMMPS) to model silk self assembly behaviors. Developing Python script to automate analysis.
- Analyzing results from a scanning electron microscopy (SEM) for a COVID-19 antiviral coating

Undergraduate Research Assistant at Basuray Labs (40 hours/week)

May 2019 - Jan 2021 (Seasonal)

- Conducted and analyzed cyclic voltammetry (CV) and electrochemical impedance spectroscopy (EIS) results
- Independently design experiments to enhance the lab-on-a-chip device using spectroelectrochemistry.

Leadership and Involvement

American Institute of Chemical Engineers | President

Aug 2020 - Present

- Organize events, invite industry professionals and lead the executive board as president.

Coding and Community | Instructor, President

Aug 2018 - Present

- Teach minority students basic computer science and manage subcommittees to organize outreach events and programs.

Rensselaer Center for Open Source | Developer, Mentor, Project Manager

Aug 2018 - Aug 2020

- Act as mentor, developer, and project manager. Collaborate with a team to construct applications for uses such as COVID tracking, time management, and in-class quizzing.

Memberships and Affiliations

- American Institute of Chemical Engineers
- Phi Lambda Upsilon Chemistry Honors Society

Awards

- Brinegar Award for Outstanding Students in Undergraduate Research at RPI
- Genentech Outstanding Student Award
- AIChE Regional Conference 2nd Place Award
- Dean's Honors List
- Rensselaer Leadership Award (scholarship)
- NJIT REU Conference 2nd Place Award
- Nominated for the national URP Conference

Skills

- Python, C++, Matlab, R, HTML/CSS, Tensorflow
- Microsoft Office and Adobe Creative Suite
- Strong verbal and written communication
- Strong analytical thinking
- Fast learner
- Positive attitude with a growth mindset
- Fluent in Hindi, Basic proficiency in Latin

Certifications

- Biology and Chemistry Laboratory Certified
- CPR and BLS Certified
- Lean Green Belt Certified
- Lathe, Drill Press, and Machine Trained