

Shivam Patel

Incoming Software Engineering Intern at NCR Corporation
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EDUCATION

Georgia Institute of Technology

Bachelor of Science in Computer Science

Atlanta, Georgia

August 2019 – Jun 2023

- Concentrations: Intelligence and Modeling and Simulation
- Relevant Coursework: Object Oriented Programming, Data Structures and Algorithms, Computer Organization and Programming, Statistics

GPA: 4.0

EXPERIENCE

Mitchell Lab at Georgia Institute of Technology

Undergraduate Researcher

Atlanta, Georgia

January 2022 – Present

- Utilizing Python and SemNet software to form semantic networks with biomedical concepts of interest using NLP from database of PubMed publications
- Developing pipelines for clustering and visualization of knowledge graphs using knowledge graph embeddings

Georgia Institute of Technology

Peer Led Undergraduate Study (PLUS) Leader

Atlanta, Georgia

January 2021 – May 2021

- Led biweekly review sessions for CHEM 1211k class with 20+ students in attendance
- Created lesson plans based on material covered in lectures
- Communicated with professors and other tutors to create practice problems for assessments
- Worked with students 1-on-1 to explain and work through complex chemistry problems

Stress Monitor Project

Team Lead

Atlanta, Georgia

January 2021 – May 2021

- Led team of 4 undergraduates in semester long project to build a non-invasive stress monitor
- Integrated functionality using an Arduino and heart rate sensor to detect heart rate variability
- Developed computational models to calculate stress score using a real-time data stream from the monitor
- Practiced project management skills to organize team meetings, plan the project, and meet checkpoint requirements

Coskun Lab at Georgia Institute of Technology

Undergraduate Researcher

Atlanta, Georgia

November 2019 – August 2021

- Computationally investigated the spatial relationship between RNA binding proteins and organelles
- Developed Python script to efficiently web-scrape online databases to automate attainment and organization of cell images
- Utilized image processing and image segmentation libraries in MATLAB to analyze co-stained images of RNA
- Performed literature review on the mechanics of COVID-19 spread for *COVID-19 Tools, Diagnostics, and Prevention* paper

Chemlink Labs

Research Intern

Atlanta, Georgia

January 2019 – May 2019

- Collaborated with chemical engineers to automate chemical quality assessments
- Devised a computational model using near-infrared spectroscopy to detect active enzymes in detergent tablets
- Analyzed spectroscopy data to quantify amount and quality of chemicals produced in labs
- Model was able to correctly detect the amount of active enzyme with an accuracy of 85%

SKILLS

Languages

• Java | Python | JavaScript | HTML | CSS | C | MATLAB | SQL

Platforms & Frameworks

• React.js | Node.js | Express.js | NumPy | SciPy | Pandas | scikit-learn | Google Firebase

Technologies

• Git | GitHub | IntelliJ | Visual Studio Code | Postman | Heroku