

Sonali Kaushal

Phone: +1 (540)-385-1733

Email: kaushalsonali27@gmail.com

LinkedIn: <https://www.linkedin.com/in/sonali-kaushal-86a028197/>

EDUCATION

Virginia Polytechnic Institute and State University (Virginia Tech), College of Engineering, Blacksburg, Virginia

- **Degree:** Bachelor of Science in Computer Science
- **Major:** Computer Science
- **Minor:** Mathematics

EXECUTIVE SUMMARY

- Recognized for excellent problem-solving and analytical skill, meeting project deadlines and dedication by employers and professors. Strong communication, collaboration, and interpersonal skills with proficiency in grasping new technical concepts.

ACADEMIC CREDENTIALS

- **Current GPA:** 3.74
- Dean's List: Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022
- Received the Siemens scholarship in recognition of excellent performance.

PROFESSIONAL EXPERIENCE

Student Supervisor and Math Tutor at Virginia Tech Math Emporium

Aug 2021 – Present

- Trained new staff and maintained staff records.
- Ensured that staff adhered to proper tutoring and work procedures.
- Ensured timely answering of students' questions while managing staff duty assignments for virtual and in-person tutoring.
- Improved the problem-solving skills of students taking math emporium courses, including Linear Algebra, Precalculus, Business Calculus, and Elementary Calculus.

Technical Intern at Siemens Technology and Services, Bangalore

May 2022 – July 2022

- Employed Artificial Intelligence for Visual Inspection Analysis and focused on data science and machine learning tasks.
- Implemented a Deep Image Search algorithm with an accuracy of 80% and optimized an object detection and image classification model with an accuracy of 96% to detect abnormalities in production line items.
- Presented the culmination of completed internship assignments to the Project manager and Project supervisor.

COMPUTER SCIENCE PROJECTS

Project: External Sort

June 2022

- Implemented an external sorting algorithm for binary data using heapsort and buffers and calculated the number of disk reads, disk writes, cache hits and cache misses.
- Performed Disk I/O on Random Access Files and sorted datafiles larger than the buffer pool in ascending order using a modified form of Heapsort.

Project: DNA Tree

May 2022

- Implemented a Java program to define a new 5-way branching tree data structure for storing DNA sequences.
- The program allowed for the insertion, removal, and search of a particular node, and provided the ability to print out the tree in a well-formatted manner.
- Implemented leaf nodes using the concept of flyweight nodes for improved design.

Project: RPN Arithmetic

May 2022

- Implemented an infinite precision arithmetic package for extremely large non-negative integers expressed in Reverse Polish Notation using linked-lists and stacks.

EXTRAMURAL ENGAGEMENTS

Virginia Tech Dance Team

Aug 2020 - Sep 2021

- As an active member of the Junoon Bollywood fusion dance team at Virginia Tech, I have gained valuable experience in teamwork and performance.
- I have learned these skills through participating in bake sales, practices, and mixers.

Galipatia Community

Aug 2019 – May 2020

- As an active member of Galipatia at Virginia Tech, I have developed my social and communication skills.
- I have also gained valuable experience in community service by volunteering in the Blacksburg area.

SKILLS

- | | | | | |
|-------------------|--------------|--------------------|-----------------|--------------------|
| • MATLAB | • C | • C++ | • JavaScript | • HTML |
| • Java | • Python | • Microsoft Suites | • Google Suites | • PyTorch |
| • Time management | • Work ethic | • Optimism | • Organization | • Active listening |