

Tajveer Singh Dhesi

Objective

I am a third year computer science and mathematics student on schedule to graduate in May 2025, meanwhile I am in search of different and new skills in which I can gather valuable experience in a variety of tasks; equally I believe that I have the confidence, enthusiasm and creativity to flourish in such a role.

Education

2021-2025

Colgate University
Bachelor of Arts

Major 1: Computer Science
Major 2: Mathematics

2019-2021

Durham Johnston Sixth Form
A-Levels and EPQ

A-levels: Maths (A*), Further Maths (A*), Physics (A*),
Computer Science (A*)
EPQ: Extended Project Qualification (A)

Honors and awards

Spring 2023

Dean's Award with Distinction for Academic Excellence –
Colgate University
This award is given to students who receive a term grade point average of 3.6 or higher while completing at least three course credits for a conventional letter grade and a minimum of 3.75 total course credits. This is the highest award for academic excellence.

Fall 2022

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Fall 2021

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		credits for a conventional letter grade and a minimum of 3.75 total course credits. This is the highest award for academic excellence.
	May 2021	Alumni Memorial Scholar – Colgate University Access to \$10,000 in funding for academic research of my choosing, Awarded to ~1% of applicants in class year, based on academic merit and student involvement.
	March 2020	Head Boy – Durham Johnston Sixth Form Selected as Head boy by Head teacher, Deputy Head Teacher, Head of Sixth Form and Deputy Head of Sixth form to act as student voice and represent student body in meetings and making of key decisions.
Research experience	May – Sep 2023	Research Assistant - Colgate University Advisor: Amirhossein Manzourolajdad <ul style="list-style-type: none"> Generated runtime and accuracy data for an AI model that predicts RNA base sequences from tertiary structure PDB data to help gain understanding of AI's performance. Used University servers and Python code to access and run AI on the node and feedback data to professor to implement in a published research paper.
	2023	Journal publications <ul style="list-style-type: none"> Tajveer S. Dhesi, Alyssa W. Bannister, Amirhossein Manzourolajdad "Deep Learning of Ligand-bound RNA Tertiary Structures Diverges from Learning Unbound Ones: A Case Study Using The gRNAde Software".
Publications		
Professional training	2021-2022	IACT Excel Certification Online <ul style="list-style-type: none"> Description: Completed self-directed Excel certification with comprehensive Excel portfolio project – CDP Certified.
Professional affiliations	2021-Present	Director/Producer for Colgate Division 1 Varsity Athletics Colgate University <ul style="list-style-type: none"> Liaise with ESPN to dictate when media timeouts are taken and which ads to play during Colgate Division 1 athletics and NCAA games. Enhances viewer experience using directing expertise by deciding which camera is showing on broadcast and when, including liaising with the replay assistant.
	2023-Present	Curriculum Developer for Colgate Coders Colgate University

- Fostered a community of over 100 computer science enthusiasts with events and activities for students to participate in.
- Helps build student's skill in computer science and enhance employability with educational presentations in topics in computer science (e.g. intro to R, command line basics etc).
- Assisted 20+ students in preparation for a hackathon by hosting a workshop in HTML and CSS basics.

Aug 2023–Dec 2023

Laboratory Teaching Assistant

Colgate University

- Assisted computer science laboratory instructor with helping students in building their understanding of key concepts and applying them in lab assignments.
- Strengthened my own and enhanced others' understanding of Java by assisting in two sections of Discrete Structures (COSC 290) and one section of Data structures and algorithms (COSC 202) both taught in Java.

Jan 2023–Dec 2023

Student Leader in the Dean of the College Division

Colgate University

- The Link team of approximately 65–75 rising sophomores, juniors, and seniors helps orient new students to Colgate each year. Links help prepare students for individual success and make an important impression on the students they serve.
- Through small and large group experiences, educational programs, and social events, the Orientation Links increase new students' familiarity with student life, faculty and academic expectations and opportunities, campus resources, and the larger Hamilton community.

Charity/Voluntary Work

March 2023

Affordable Homeownership Volunteering

Habitats for Humanity Susquehanna

- Direct home construction, specific tasks to be determined by construction schedule over Spring Break week.
- Assisting at the ReStore - a store where household and construction goods are repurposed and sold - Painting large walls, manual repair etc.
- opportunities to connect their service experiences to wider conversations around racial injustice, gentrification and lack of affordable housing.

Professional service

Nov 2023

Dandyhacks Hackathon

University of Rochester

Made fully functioning random maze generation game from scratch using JavaFX – Achieved 2nd in Entertainment Track.

Relevant Classes taken /taking

Aug 2021-Present	Colgate University Linear Algebra, Number Theory and Abstract Algebra, Real Analysis, Data Structures and Algorithms, Discrete Structures, Computer Systems, Differential Equations, Probability, Data Analysis, Combinatorial Problem Solving, Partial Differential Equations, Natural Language Processing.
Spring 2024	University of Wollongong Data Mining and Knowledge Discovery, Modern Artificial Intelligence.

Computer skills

Programming	Python, Java, R, VB.NET, VBA, C, HTML, CSS, JavaScript
Platforms	VScode, Visual Studio, Python IDLE, Processing

References

Available Upon Request.

My Website

<https://tsinghdhesi.github.io/Tajveer-Website/>