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-Present

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

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.

Spring 2022

Dean's Award with Distinction for Academic Excellence –

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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 2021

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

TAJVEER SINGH DHESI - CV

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 - June 2023

Research Assistant - Colgate University

Advisor: Amirhossein Manzourolajdad

- Generated runtime and accuracy data for an Al model that predicts RNA base sequences from tertiary structure PDB data to help gain understanding of Al's performance.
- Used University servers and Python code to access and run All on the node and feedback data to professor to implement in a published research paper.

Publications

2023

Journal publications

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 aRNAde Software".

Professional training

2021-2022

IACT Excel Certification

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

- 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.

TAJVEER SINGH DHESI - CV 2

- 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.

Sep 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 DivisionColgate 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.

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.

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

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References

Available Upon Request.

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