

# DRISHTI GOEL

Research Fellow, Microsoft M365 Research

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🌐 goeldrishti.github.io/

🎓 Google Scholar

🌐 LinkedIn

## EDUCATION

### Dayalbagh Educational Institute, Agra

B.Tech in Electrical Engineering (Specialization in Computer Science)

2019 – 2023

CGPA: 9.573/10.00

→ University Founder's (1 out of  $\approx 5000$ ) & Director's Medals Recipient (1 out of  $\approx 500$ )

→ **Courses:** Data Structures & Algorithms, Computer Architecture, Computer Networks, Operating Systems, Neural Networks, Network Analysis & Synthesis, Micro-controllers & IoT, Advanced Optimization, Quantum Computing

## EXPERIENCE

### 1. Microsoft-365 Research

Research Fellow

August, 2023 - Present

Bangalore, India

- Broadly working on AI for IT and Cloud Systems (AIOPs), LLMs & SLMs for service reliability in large-scale cloud systems and developer productivity & satisfaction
- In addition to the research impact, the work has also been adopted by over 130 teams across Microsoft

### 2. Grahn Lab, University of Western Ontario

MITACS GRI Research Intern

June - August, 2022

London, Canada

- Using Pupillometry to detect emotions induced by music in Alzheimer's Patients
- Explored ML interventions to detect emotions on the basis of pupil-dilation data acquired by controlled experiments using the Eyelink 1000 Eye-Tracker.
- Skills Acquired: Conducting systematic reviews, developing search strategies and working on various databases and database managers, Pupillometry, and conducting testing sessions.

### 3. NeenOpal Inc.

Data Science Intern

Jan - May, 2022

Bangalore, India

- Worked on several international client projects related to business intelligence and ML-driven decision-making using Power BI, Tableau, and Google Analytics
- Single-handedly developed a Power-BI extension to automate the filter-changing & screenshot-taking process using Python
- Was recognized as the intern of the quarter.
- Articles: Power BI Screenshot Automation 📄, Visualizing the World Using Power BI 📄

### 4. Geniusup India Pvt. Ltd.

Topic Modeling using the LDA Algorithm

June - August, 2021

Agra, India (Online)

- Built a topic model using the LDA Algorithm on "The Hindu" e-newspaper.
- Skills Acquired: Web Scraping, Data Cleansing, and Visualization (using Python), Machine Learning (unsupervised), Latent Dirichlet Allocation (LDA) Algorithm, High-level document drafting, Report: Topic Modeling 📄

## PUBLICATIONS

$S = \text{UNDER SUBMISSION}$ ,  $C = \text{CONFERENCE}$  (\* = EQUAL CONTRIBUTION)

### [S.2] Efficient Automated Root Cause Analysis with Prompt Optimization

Drishti Goel, Raghav Magazine, Supriyo Ghosh, Akshay Nambi, Prathamesh Deshpande, Xuchao Zhang, Chetan Bansal, Saravan Rajmohan

European Conference on Computer Systems

[EuroSys'25]

### [S.1] Time Warp: The Gap Between Developers' Ideal vs Actual Workweeks in an AI Driven Era (🔗)

Sukrit Kumar\*, Drishti Goel\*, Thomas Zimmermann, Brian Houck, B. Ashok, Chetan Bansal

International Conference On Software Engineering

[ICSE-SEIP'25]

### [C.3] Prototype-Reservation for Explainable Classification under Imbalanced & Scarce-Data Settings(🔗)

Vaibhav Ganatra, Drishti Goel

Machine Learning in Healthcare

[MLHC'24]

### [C.2] X-lifecycle Learning for Cloud Incident Management using LLMs (🔗)

Drishti Goel, Fiza Husain, Aditya Singh, Supriyo Ghosh, Anjaly Parayil, Chetan Bansal, Xuchao Zhang, Saravan Rajmohan

ACM International Conference on the Foundations of Software Engineering

[FSE'24]

### [C.1] Impact of Quality Teaching & Core Values Courses on a Student's Professional Life

Drishti Goel, Bhavya Kapur

Best Paper Presentation – Indian Students System Conference

[Paritantra'19]

## SELECT PROJECTS

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1. **MediTrain AI - Empowering the doctors of tomorrow, today** 2023  
→ Present a novel AI-driven application designed to revolutionize medical training by generating a diverse range of patient personas. This innovation empowers trainee doctors to practice an array of diagnostic procedures in a risk-free, controlled environment.  
→ Grand winner of the Microsoft Fix-Hack-Learn Hackathon
2. **Quantum Game Theory** 2023  
→ Developed an optimal strategy for a single and double player Quantum Games such as Quantum Tic-Tac-Toe and Tant-Fant
3. **Image Caption Generator - Eyes for the Blind** 2022  
→ Worked on building a neural image caption generator using CNN encoders and RNN decoders. Next, using Google's Text-To-Speech library (gTTS) we converted the generated captions to speech
4. **Innovative PPE design for Healthcare Workers** 2022  
→ Developed and presented the product prototype at the National Level AICTE Chattra Vishwakarma Awards Exhibition in front of the Honorable Minister of Education, Shri Dharmendra Pradhan.  
→ The project was published in the annual AICTE Chattra Vishwakarma Award 2020 Booklet.
5. **Smart Home Automation to Aid the Caregiving of Dementia and Alzheimer's Patients** 2022  
→ Built a working model to aid the caregiving of Dementia and Alzheimer's patients, many of whom had been living alone during the lockdown. This was done by implementing home automation and alert systems (via calls, messages, and alarms) using the Internet of Things

## AWARDS & ACHIEVEMENTS

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1. **University Founder's Medal** Recipient (1 out of  $\approx 5000$  graduates) 2024  
→ Awarded annually to a student for academic excellence, social service, and an all-rounder personality
2. **Director's Medal**– Two times recipient (1 out of  $\approx 500$  graduates) 2024  
→ Awarded for scoring the highest Grade-Point Average across all engineering streams, and  
→ For scoring the highest grades in Cultural Education across the University
3. **MITACS Globalink Research Scholarship** Recipient ( $\approx$ CAD 8,000) | University of Western Ontario 2022  
→ Eligible to receive the MITACS Globalink Graduate Fellowship ( $\approx$  CAD 15,000)
4. Amongst the 15 students, selected for a student exchange program with the **Hong Kong University** 2020  
out of  $\approx 3,000$  university applicants
5. Stood Second in the Regional-level Debate Competition at the AIU Youth Festival 2019  
→ Represented Region at the **National Level**

## TALKS & PRESENTATIONS

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1. Guest Speaker @Google Developer Student Club on "The Fundamentals & Applications of ML" 2022
2. University representative and speaker at the Engineer's Day conference alongside **Mr. Sam Pitroda**, 2021  
→ The internationally renowned telecoms innovator and policymaker.
3. Project– "Entrepreneurial Methodology to Increase the Income of Rural Areas in India" 2020  
→ Qualified & presented at the **AICTE CVA National Level** to the Education Minister of India
4. Presented my project, "Preservation and Integration of the Heritage of India and Hong Kong" 2020  
→ In collaboration with **The Hong Kong University**
5. Selected- "*Frugal Innovation with Foldscope*" workshop, by Dr. Manu Prakash from **Stanford University** 2019

## LEADERSHIP POSITIONS

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- **Author**– "Defy Your Gravity: Rise Above Challenges & Embrace Your Potential" 2025  
→ *Book to be released in January, 2025* (📖)
- **'MAA'**– A social enterprise to help Indian village women achieve financial independence 2021  
→ *Work presented at the National Level of the AICTE Chattra Vishwakarma Award Competition*
- University Chair, IEEE Women in Engineering 2020 – 2023
- Class Representative (University) 2019 – 2023
- *Member*: IEEE Computer Society, IEI, System Society Of India, University's Incubation Cell 2019 – 2023
- *Volunteer*: Society For Preservation Of Healthy Environment/Ecology/Heritage Of Agra 2012 – Present
- School Head Girl & Student Body President 2018 – 2019