

Armaan Nanji  
28 Scarden Avenue  
437-484-1315  
armaan.nanji@mail.utoronto.ca

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Dear Member of Faculty,

I'm currently an undergraduate student at the University of Toronto, majoring in computer science and economics. I'm also an aspiring computer science researcher, with a particular interest in artificial intelligence, and I'd love to gain some experience in the field.

I'm currently working at the ReStore lab, under the U of T's Faculty of Medicine, to provide statistical support. During my time here, I've performed several statistical analyses of experimental data. This included performing logistic regression, ANOVA and t-tests, as well as verifying the assumptions of each model beforehand. I've summarised my findings in reports, using visualisations as well as presenting them orally during meetings. I've also performed data extractions, where I developed abilities to interpret and identify key findings in existing literature.

I've also been volunteering for professor Tianyi Wang in the Department of Economics. Here, I've learned how to use modern text embeddings from OpenAI and Cohere to classify movies. I've gone through the processes of cleaning data, engineering features, creating visualisations, optimising models and summarising my findings. While my experience at the ReStore lab consisted mostly of engaging in traditional statistics, this opportunity allowed me to gain experience in working with modern machine learning techniques.

Outside of my formal research experience, I've also taken courses related to my interests, such as a course in artificial intelligence (CSC 384) and machine learning (CSC 311), and worked on side projects to develop my skills. One project in particular was a sentiment analysis model that used recent news articles to gauge public attitudes surrounding certain topics. Through this project, I started to better understand preprocessing pipelines, word embeddings, hyperparameter optimization, and how to deploy a project through a web app.

I aspire to obtain a PhD in computer science, and eventually become a full time researcher. Through this opportunity, I will be able to gain the experience needed to strive towards that goal.

Thank you for your time and consideration,

Armaan Nanji