Subject: Prospective Graduate Student for Fall 2023 Session

Hello Prof. X,

My name is **[your name]**, a fresh graduate of the Department of Electrical and Electronic Engineering (EEE), **[your university]**. I hope to apply for my graduate studies in **Fall 2023** at the University of Michigan. I believe my research interests are perfectly aligned with your research topics. While working on a project of my own, I recently had a look at your article titled **"Benchmarking deep learning-based models on nanophotonic inverse design problems"** and the way you have proposed to tackle several inverse design problems with the help of deep learning-based techniques has fascinated me. I am greatly interested to work under your supervision and thus, wanted to know if you had any openings and whether I would be a good fit for your group.

My CGPA is […]/4.00. My GRE score is […] & TOEFL score is […]. My research interest lies in the fields of disordered photonics, inverse design of photonic devices, deep learning applications in photonics, etc. For the last two years, I have been actively involved in the **solid-state electronics and photonics (SSEP) research group** of my alma mater. My undergraduate thesis is on **Finite-Difference Time-Domain (FDTD) Analysis of Anderson Localization in Non-ideal Disordered Systems**. Here, I simulated photonic nanostructures with the help of FDTD analysis tools such as **MEEP, MPB, Lumerical,** etc. The goal of the research was to observe the localized wavelength, quality factor, EM fields and understand the underlying physics behind performance enhancement with different parameters. From the aforementioned research projects, our group prepared **two journal articles** (one of them is currently under review in **Optics Express**), where I played the role of the leading (first) author. I also co-authored **a journal paper & two conference papers** in my undergraduate studies based on my research projects on deep learning for medical image analysis & system design using FPGA.

My detailed CV with all my research experience and other relevant information is attached herewith for your kind consideration. Please let me know if you are interested in me as a candidate. I would be very glad to talk with you about my interests and their relevance to your research **over Skype/Zoom**. I look forward to hearing from you.

Sincerely,
[your name]
[your university]

Personal Website:
Phone/Whatsapp:
Linked In:
Google Scholar: