**WIDS 2023**

**Neural Networks for Computer Vision**

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**Project Objective:**

This project aims to dive into the concepts of Computer Vision and combine them with our knowledge of programming to build functional image classifiers. The focus would center on classifying images from two well-known datasets, MNIST and CIFAR-10, to facilitate a gradual understanding of programming concepts and their application in image analysis.

**Pre-Requisites:**

No hard prerequisites. Everything will be taught on the go. Python and NumPy are a plus though.

**Resources:**

You will be asked to study some of these during the project. Rest are additional study material for exploring and further reference -

[Python Numpy Tutorial (with Jupyter and Colab)](https://cs231n.github.io/python-numpy-tutorial/)

[NumPy quickstart — NumPy v1.26 Manual](https://numpy.org/doc/stable/user/quickstart.html)

[CS231n Winter 2016 - YouTube](https://youtube.com/playlist?list=PLkt2uSq6rBVctENoVBg1TpCC7OQi31AlC)

[Tutorials — Matplotlib 3.8.1 documentation](https://matplotlib.org/stable/tutorials/index.html)

[GeeksforGeeks](https://www.geeksforgeeks.org)

[Convolutional Neural Networks (Course 4 of the Deep Learning Specialization) - YouTube](https://www.youtube.com/playlist?list=PLkDaE6sCZn6Gl29AoE31iwdVwSG-KnDzF)

[What is Natural Language Processing? An Introduction to NLP](https://www.techtarget.com/searchenterpriseai/definition/natural-language-processing-NLP)