## DS 211: Numerical Optimization Course Project Proposal

## Names of students:

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**Project Title**: Study of Adam optimizer and its implementation to train a deep neural network for handwritten digit recognition.

## Abstract:

There are plenty of different modern optimizers used to train ML models and DL networks. Adam is one of the go-to optimizers for Deep learning applications in computer vision and natural language processing. Hence, as an aspiring data scientist it is necessary to study Adam in detail involving its mathematical formulation, implementation, advantages and limitations. Along with this, to have hands on experience we are going to implement Adam to train a Deep learning neural network for handwritten digit recognition.