

## **Background**

Previously, I only had some ideas about Federated Learning in space recommendation systems. So, I started to look out for other directions in which we can utilize Federated Learning for enhancing the efficiency of algorithms for edge computing. While researching ideas, I came across several of your works on Federated Learning. The papers like FedNL and Guide to Federated Optimization enlightened me about the different approaches and directions.

At Optimization and Machine Learning Lab, there is ongoing research in Federated Learning in multiple spaces like Optimization, Communication, Generalization, and many more. I believe that under the guidance of Prof. Peter I can learn more about these spaces in the context of Federated Learning and contribute to the ongoing project. Which will eventually help me build a profile for my Ph.D. and decide on a direction for it.