

Summary of Peer-Review Process

All three proposals had something unique about them. A group is trying to understand the impact of deterministic privacy techniques in Deep Learning models while another group is experimenting with the implementation of LARS in Spark. Another area of exploration is the GPU memory optimization with Backpropagation using TensorFlow. All these proposals provide great insight into the type of challenges we face while designing these machine learning systems and deciding how their implementations need to be factored into our decision making based on the application domain.

Out of the three proposals, I liked the LARS implementation in Apache Spark due to its potential. I liked the structuring and formatting of the GPU memory optimization proposal due to their well-defined proposal and thought process in terms of their problem planning. The deterministic privacy group has valid concerns and I'm excited to learn about their findings. But the LARS group has me interested due to the potential upside possible with its implementation. LARS has helped in reducing training times drastically in recent years and with its integration with Spark, if possible, it can achieve even better performance and that has been rooting for their group.

Peer reviewing my fellow class members' proposals has broadened my understanding of this area. It has helped me realize the different challenges being faced in the design of real-world Machine Learning Systems and how privacy, memory, latency, accuracy, performance, etc are a huge factor in our decision making for the incorporation of these systems into our applications. It has helped me realize that there is still a lot of uncharted domain in this field and lot of potential research opportunities exist that could alter the landscape of Machine Learning drastically.