# A Contrastive Approach to Weight Space Learning

DJ Swanevelder

Supervised by: Ruan van der Merwe (Bytefuse)

### Context

### **Contrastive Learning**

- Meaningful Representations
- Similiar vs Dissimliar
  - NLP → Semantic
    Relationship (Word2Vec)

# **Weight Space**

- Loss Landscape
- 1 Datapoint → Full Model

## **Weight Space Learning**

- Meta-Learning
- Discriminate
  - Model Properties
  - Performance
- Generative
  - High-performing Model Weights

