# **Deployment** CSC2541H1 Topics in Machine Learning, Winter 2025, UToronto

**Chris J. Maddison** 

### Announcements

- after class.
- Presentation marking update.

### If you are assigned to present on April 4, come talk about presentations

#### **Questions?**

## Today

- Deploying LLMs imposes additional latency and efficiency concerns.
- Today's topics:
  - Speculative decoding speeding up decoding algorithmically
  - Paged attention (and KV cache) caching to speed up attention
  - Flash attention and decoding more memory-access efficient attention computation for faster decoding (and training)
  - Smooth quant post-training quantization for faster inference with less memory use