Applications affected by loss of plasticity

- Continual learning is starting to be used in applications

  - Matching riders and drivers on Lyft (Azagirre et al. 2023) (linear learning with 1000s of features)

  - Water treatment plants (RL Core)

- And there are many applications that require continual adaptation and deep continual learning has big potential

  - Forecasting in highly complicated domains like stock markets or weather

  - Control systems in factories (due to regular wear and tear)

  - Learning (ever-changing) human preferences

  - Multi-agent systems

  - LLMs (new text on internet, live human feedback, text generated during inference)

  - On device learning (ex. prosthetics, robots, deep space exploration)

  - Electric grids in the future (with constantly changing power inputs like personal solar panels)