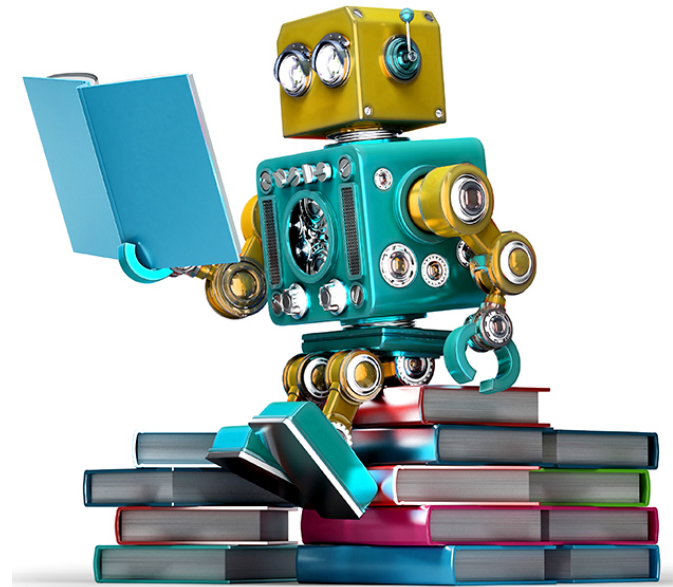# MACHINE LEARNING FROM MULTIMODAL DATA
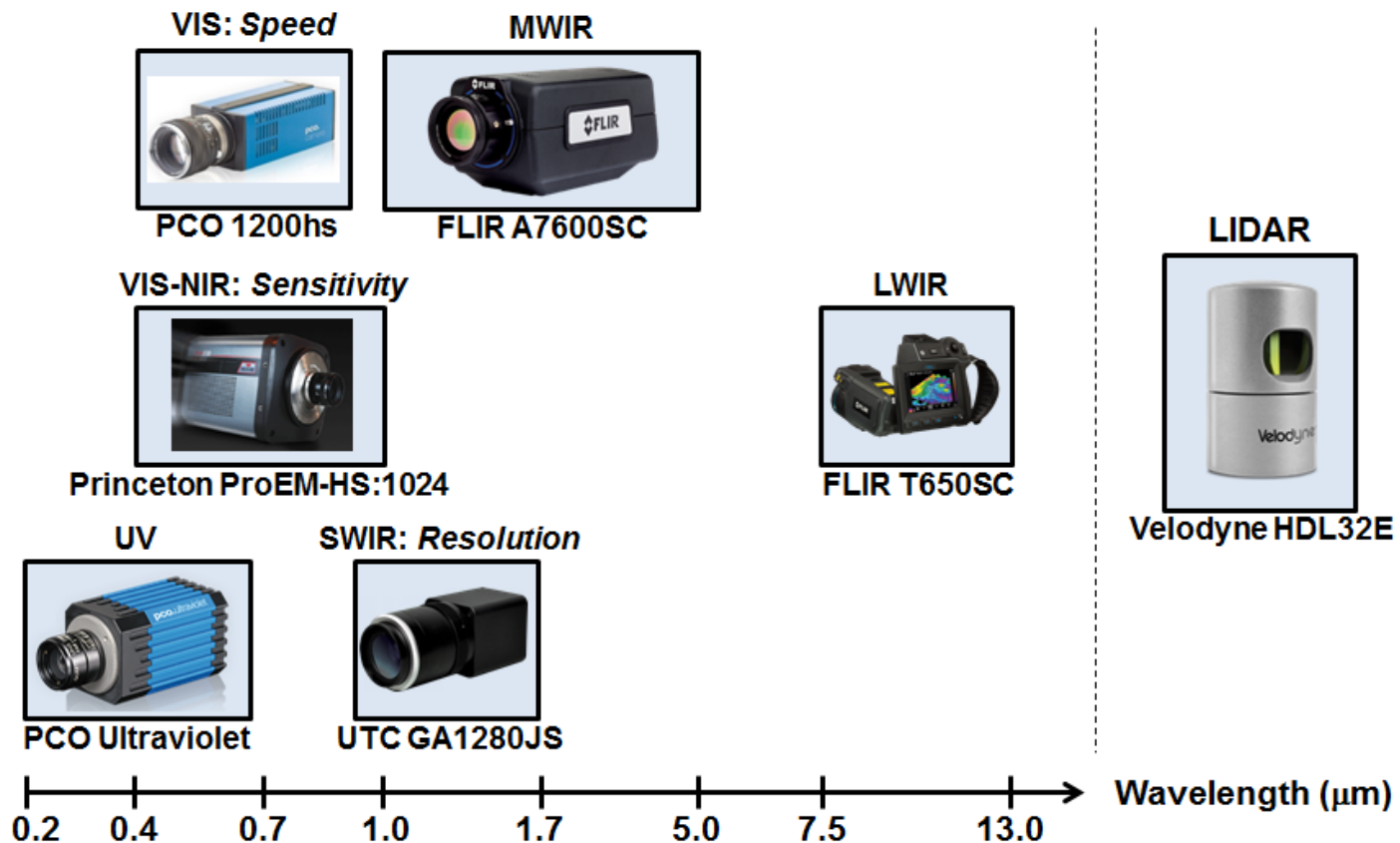
Andrea Burns

# Overarching Idea

- *How does adding multimodality improve the classification performance of supervised learning algorithms?*

  - Machine learning focus:

    - Supervised Learning

    - Classification problems

  - Multimodal focus:

    - Images

# First Steps

☐ Work with cameras of different modes

# Next Steps

- Test performance level with multimodal images
  - Static/Non-Static
  - Non-human
- Submit IRB proposal
  - Potentially move to data involving humans

# Bigger Picture

- Curate more datasets that can be used for training

- Expanding machine learning beyond commercial uses
  - Improve performance for machine learning's many applications

# Bigger Picture
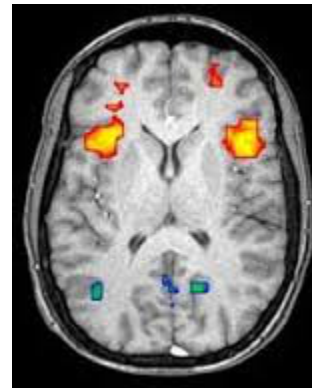
- Military
  - visual occlusion (e.g. fog, high forest density) drones
- Medical
  - more accurate diagnostics
- Security
  - surveillance, airport security

# Acknowledgements