

Previous CSCI 374 Final Project Ideas

Supervised Learning

Learning to predict:

- Golden Globe winners
- Bots vs. humans on Twitter
- Energy usage on campus
- Athlete performance (Moneyball)

Learning to identify:

- Buttons in a user interface (towards accessible interfaces)
- Musical counterpoints
- Musical authors
- Poetry eras (time periods)
- Image recognition (objects, clothes, medically diagnostic features)
- Movie genre based on actors involved
- Bias in machine learning

Learning to generate:

- New music
- Standup comedy routines
- Recommendations for clipart
- Recommendations for board games to play
- Spam emails
- Solutions to the set cover NP-complete problem
- Solutions to math problems

Broader issues:

- Addressing bias in machine learning

Unsupervised Learning

Learning patterns from and data mining:

- User transactions
- Stylistic transfer in art

Reinforcement Learning

Learning how to:

- Accomplish benchmark RL tasks
- Play Atari games
- Play other video games
- Play board games
- Drive a simulated car