



CS 229 projects, Spring 2020

All project posters and reports

Terrain Classification for Small Legged Robots Using Deep Learning on Tactile Data

▫ General Machine Learning

Hojung Choi, Rachel Thomasson

[\[report\]](#)[\[poster\]](#)

Application of machine learning methods to identify and categorize radio pulsar signal candidates

Physical Sciences

Serena Debesai, Carmen Gutierrez, Nazli Ugur Koyluoglu

[\[report\]](#)

Using Machine Learning Models to Predict S&P500 Price Level and Spread Direction

Finance & Commerce

Alex Fuster, Zhichao Zou

[\[report\]](#)

Exploring Adversarial Training for Out-of- Distribution Detection

▫ General Machine Learning

Irena Gao, Ryan Han, David Yue

[\[report\]](#) [\[poster\]](#)

Image Super-Resolution Via a Convolutional Neural Network

▫ Computer Vision

Ben Garber, Aitan Grossman, Sonja Johnson-Yu

[\[report\]](#) [\[poster\]](#)

Measuring and Incorporating Correlations in Generative Adversarial Networks

General Machine Learning

Vishesh Gupta

[\[report\]](#)

Classification of Legal Text

Finance & Commerce

Krithika Iyer

[\[report\]](#)

Pancreatic cancer prognosis using clinical and radiomic data

Life Sciences

Arash Jamalian

[\[report\]](#)

Household Animals Classification Using Deep Learning

▫ Computer Vision

Lei Lin

[\[report\]](#) [\[poster\]](#)

GAN-Based Image Data Augmentation

Computer Vision

▫ David Liu, Nathan Hu

[\[report\]](#) [\[poster\]](#)

Semi-supervised Segmentation of Brain MRI Images

Life Sciences

Ali Mottaghi

[\[report\]](#)

Using LSTM and SARIMA Models to Forecast Cluster CPU Usage

General Machine Learning

Langston Nashold, Rayan Krishnan

[\[report\]](#)

Predicting a Decline in Patient Reported Outcomes for Cancer Patients on Chemotherapy

Life Sciences

Nicolai Ostberg, Dylan Peterson

[\[report\]](#)

Vision-Based Precision Pose Estimation For Autonomous Formation Flying

General Machine Learning

Rohan Punnoose

[\[report\]](#)

CS229: Final Report

Finance & Commerce

Kun Qian, Xingzi Xu, Emily You

[\[report\]](#)

Evaluating Autoencoder Methods for Building a Molecule Graph Autoencoder

▫ General Machine Learning/Physical Sciences

Amelia Woodward

[\[report\]](#) [\[poster\]](#)

Machine Learning based classification for Sentimental analysis of IMDb reviews

Natural Language

Chun-Liang Wu, Song-Ling Shin

[\[report\]](#)

Application of Artificial Neural Network in Streamflow Forecasting

▫ Physical Sciences

Mian Xiao, Shanni You

[\[report\]](#) [\[poster\]](#)

CT-based Patient Triage of COVID-19: Radiomics Prediction of ICU Admission, Mechanical Ventilation, and Death of Patients

▫

Life Sciences

Xianghao Zhan, Yiheng Li

[\[report\]](#) [\[poster\]](#)

Data Driven Solutions and Discoveries in Mechanics Using Physics Informed Neural Network

Physical Sciences

Qi Zhang, Yilin Chen, Ziyi Yang

[\[report\]](#)

Investigation of Near-accident Car-driving Scenario using Deep Imitation Learning and Reinforcement Learning

▫

Theory & Reinforcement Learning

Wentao Zhong, Jiaqiao Zhang

[\[report\]](#) [\[poster\]](#)

Collaborative Filtering on Keywords Recommendation for Clinical Trial Records

▫

General Machine Learning

Xiao Zhou

[\[report\]](#) [\[poster\]](#)