Patricia (Patti) Degner

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A data science graduate student specializing in machine learning.

EDUCATION

University of California, Berkeley; Master of Information and Data Science, GPA: 3.86   *Dec 2020*

University of Kansas; Lawrence, KS - B.S. Supply Chain Management, GPA: 3.55   *May 2017*

EXPERIENCE

Planner Buyer Agent, Randstad Engineering onsite at Xcel Energy; Thornton, CO   *2018-2019*
- Performed data analysis and created reports for improved efficiency of Xcel's supply chain
- Created dashboard to show individual employee progress on work objectives

English Teacher, International Language Academy; Hanoi, Vietnam   *2017-2018*
- Communicated concepts to students who do not speak my language
- Awarded Outstanding Teacher for my skill and initiative in professional development

Office Assistant, University of Kansas Office of Study Abroad; Lawrence, KS   *2015-2017*
- Assisted in managing sensitive academic records for 1800+ students that study abroad at KU each year

PROJECTS

These projects and more can be viewed on my portfolio: https://pdegner.github.io/
Natural Language Processing and Deep Learning for Sentiment Analysis of Mountain Project
- Scraped MountainProject.com using Python and BeautifulSoup
- Trained a transfer learning model with DistilBERT to label sentiment of the online forums
- Analyzed the sentiment to determine which types of climbing gear are considered best

Python and Machine Learning for MNIST Handwritten Digit Classification
- Used KNN, Naive Bayes, and Gaussian Naive Bayes to classify and generate images of digits

Deep Learning GANs for Audio Upscaling
- An ongoing team project to gather high-quality audio, compress it, then use GANs to restore it
- Conduct self-guided, in-depth research about audio manipulation with

Mask R-CNN to Outline Car Damage
- Trained CNN to label an image of a car as damaged or whole
- Used masking to outline the damage on images

A Real-World A/B test: Are Difficulty Labels Helpful for Test Takers?
- Surveyed 200+ participants on trivia questions, randomly split into labeled or unlabeled difficulty
- Used linear regression and LASSO in R to analyze the results and determined that participants performed better on the test if the difficulty was labeled

SKILLS

Programming: Python (numpy, pandas, seaborn, scikit-learn), R (tidyverse), MySQL
Other Technologies: Google Cloud, TensorFlow, Docker, Github, Transformers, Spark, Hadoop
Skills: Web scraping, Data cleaning, Statistical Modeling, Causal Inference