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STEVEN YAN

Technical Skills

Machine Learning, SQL (MySQL), Python (NumPy, Pandas, SciPy, Scikit-learn, Tensorflow), Data Analysis, Data Visualization (Matplotlib, Seaborn, Tableau), Git, Microsoft Office, HTML/CSS

Technical Projects

Melanoma Image Classifier for Mobile App Deployment – <u>tinyurl.com/mel-detector</u>

- Developed CNN model from scratch alongside pretrained models to detect melanoma trained from 33,126 images in ISIC 2020 dataset ready for deployment for app accessible to all populations
- Evaluated performance on two holdout sets achieving 95%/80% accuracy with VGG19 after addressing class imbalance by bolstering with additional datasets and data augmentation with Albumentations
- Skills: Python, NumPy, Pandas, Scikit-learn, Tensorflow, Matplotlib, Seaborn

Automated Hate Tweet Detection – <u>tinyurl.com/hate-detector</u>

- Developed NLP binary classification model for detecting hate tweets some downloaded from Twitter API to address the growing concern of hate speech to incite recent acts of violence
- Implemented resampling techniques where best results achieved with SVM with minority class addition with the holdout accuracy of 92.0% considering ROC-AUC score of 0.965 with lowest % of FNs at 6.21%
- Skills: Python, NumPy, Pandas, Tensorflow, Matplotlib, Seaborn, NLTK, Tensorflow

Credit Card Default Prediction – <u>tinyurl.com/cc-default</u>

- Developed classification model to predict whether customer will default on next payment as well as identifying main factors for customer defaulting trained on dataset of 30000 customers
- Implemented resampling techniques from imbalance-learn and smote-variants across different models and engineered novel features for classifying CC default achieving 82% accuracy
- Skills: Python, NumPy, Pandas, SciPy, Scikit-learn, Plotly, Tableau

Work Experience

Educational Consultant (Freelance), Examsherpa, New York, NY

8/2009-10/2020

- Developed individualized study plans for premeds based on assessment and academic history
- Provided targeted content review, practice problems, experience and insight into each topic, essay writing and editing services
- Developed and delivered 20-session bootcamp for students in Mentoring In Medicine, a pipeline program for underrepresented premeds
- Collaborated with content writers led by Khan Academy and AAMC the testmaking org to develop open-source high-quality test prep materials in effort to equalize access to resources for all

Curriculum Developer/Teacher Trainer, Kaplan Test Prep, New York, NY

2/2006-5/2009

- Wrote and developed MCAT Tutoring Guide for new tutors based on my training/teaching experience
- Managed team of 15 instructors in Manhattan/Bronx region by assigning classes, conducting class observations, and providing feedback to increase student excellence ratings for region
- Conducted regular prospective instructor auditions and training course for new hires

Education

Flatiron School, Data Science Online Immersive Program, NYC Campus **University of Chicago,** BA Biology, 3.7 GPA, College Honor Scholarship

10/2020-4/2021 9/1996-6/2000