Bowen Yi

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EDUCATION

The University of Michigan, Ann Arbor, MI   Expected Dec. 2024
Bachelor of Science in Computer Science
- GPA: 3.83, with University Honors
- Related Coursework: Intro to Machine Learning, Natural Language Processing (NLP), Human-Centered Machine Learning, Information Retrieval, Computer Vision, Human-Centered Software Development
- Research Interests: NLP, Computational Social Science, Affective Computing, AI for Social Good

SKILLS

- Proficiency in Python, PyTorch, C++, C, Java
- Experience in TensorFlow, Git, JavaScript, R, MATLAB, Azure

EXPERIENCE

University of Michigan, Ann Arbor, MI   Aug. 2023 - Present
Research Assistant, Podcast Project with CSE Prof. David Jurgens
- Research the conversational dynamics, narrative styles, and latent preference within over one million podcasts, utilizing advanced Natural Language Processing and Machine Learning techniques
- Initiate comprehensive pipelines for data cleansing, topic modeling, and result interpretation on podcasts
- Design, tune models that distinguish news and political content from non-news and non-political podcasts

University of California - San Diego, La Jolla, CA   Sep. 2022 - Nov. 2022
Research Assistant, Twitter Project with CSE Prof. Imani Munyaka
- Developed a Python program to extract tweets of California senators using Beautiful Soup and Tweepy
- Researched R language to visualize data and analyze the political landscape in California

PROJECTS

Patronizing and Condescending Language Detection | *NLP, PyTorch*
- Built and fine-tuned highly performing models to classify condescension comments against the vulnerable
- Researched ways to mitigate the racial and gender biases of NLP models in downstream analysis

Prime Video Reviews Classifier | *NLP*, *Sentiment Analysis*
- Trained support vector machines and Word2Vec models to classify more than one million movie reviews into three possible sentiments, achieving 85%+ accuracy on the testing dataset
- Researched and exhaustively reported feature engineering and hyperparameter tuning for classifier design

Tourist Attractions Classifier | *Computer Vision*, *Supervised Deep Learning*
- Designed and implemented a multilevel Resnet model, achieving 99% AUROC on classifying tourist attractions on the testing dataset
- Researched and applied transfer learning and data augmentation to improve the model robustness

Piazza Posts Classifier | *Supervised Learning, C++*
- Created a Bernoulli native Bayes Classifier on 10000+ Piazza posts and predicted topics of input posts, with 91% accuracy
- Provided a custom implementation of the underlying tree-based map data structure

LEADERSHIP & COMMUNITY INVOLVEMENT

Professional Events Leader, ACM @ UC San Diego   Sep. 2022 - Dec. 2022
- Initiated 5+ resume-editing and networking events with 200+ attendees for UCSD's ACM chapter

Volunteer College Application Tutor, Self-Employed   Nov. 2021 - Present
- Guided 10+ domestic and international high school students from underprivileged backgrounds on the college application process and brainstormed 50+ college essays