Bowen Yi

858-776-0900 | bowenyi@umich.edu | LinkedIn | WWW

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
- Research Interests: NLP, Computational Social Science, Affective Computing, Machine Learning

SKILLS

- Proficiency in Python, C++, C, Java, scikit-learn
- Experience in PyTorch, 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

Prime Video Reviews Classifier | *Natural language Processing, Sentiment Analysis, scikit-learn, NLTK*

- 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, Python*

- 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

Image Carving Program | *Computer Vision, C++, C*

- Implemented a content-aware seam carving algorithm to resize PPM images without distortion
- Managed dynamic memory and matrices, accomplishing a resizing accuracy rate of 98.7%

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