Zidong Xu

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https://zidong2020.github.io/show-case/index.html (more project display)

EDUCATION

GEORGETOWN UNIVERSITY   Washington, DC
Master of Data Science and Analytics (STEM field)   Expected Graduation: May. 2023
• GPA: 4.0 / 4.0

CENTRAL CHINA NORMAL UNIVERSITY   Wuhan, China
Bachelor of Information management   Sept. 2016 – Jun. 2020
• GPA: 3.61/ 4.0 (top 5%)

EXPERIENCE

GOUSEN SECURITIES CO., LTD   Beijing, China
Department of Fixed Income, Analyst Intern   Mar. 2021 – Aug. 2021
• Develop an understanding of economic and political forces affecting the issuance of bonds and the bond market through internal and external resources.
• Prepare three due diligence documents for bond issues (projects between 1 billion and 2 billion).
• Develops data and analytical processing skills, proficient knowledge of available computer programs & improves data processing systems to enhance departmental efficiency.
• Developed the company's customer service system, assisting clients in preparing and publishing annual and audit reports.

Trip.com Group Limited   Shenzhen, China
Air Ticket R&D Department, Assistant data analyst   July. 2019 – Aug 2019
• Gather data from varying sources (Social media, News, Official websites), organize and analyze information necessary to prepare client presentations, offering statements, and marketing materials (SQL, Excel, PPT).
• Write two analysis reports using (English and Mandarin) and show them to the WeChat public account.

PROJECTS

Big Data and Cloud Computing: Analyze Reddit data with Azure
• Use two subreddits datasets, submissions (1770430 rows) and comments(38152167 rows).
• Exploratory data analysis (EDA), use WordCloud to show basic info of string variables.
• Data visualization(matplotlib/ plotly) show numeric variables info, such as user's activity change over time
• Spark NLP and NLTK (Regular expressions) do text data cleaning and create dummy variables.
• Build Machine Learning Pipelines (ML Spark), such as Random Forests/Logistic Regression, to select essential features and evaluate models' performance (Accuracy, Confusion Matrix, and AUC).

Natural Language Processing (NLP): DBpedia14 classification with BERT
• Do exploratory data analysis (EDA) and Data preprocessing (solve uneven distribution labels of the dataset).
• Create batched inputs using Huggingface's DistilBERT tokenizer.
• Fineturn Huggingface's DistilBERT model, Train the DistilBert model on the training set. Compute and print out the trained model's loss, accuracy, and f1-score on the train and test sets (Use Google Colab+, GPU).
• Visualize embeddings using sklearn TSNE.

Neural Nets and Deep Learning: Object detection and time series analysis
• Download the Video from Youtube and use OpenCV. Read Video and convert it into an ordered set of images.
• Use YOLOv5 to detect vehicles from the current images (frames).
• Create new variables according to the information from the model result and perform a time series analysis.

DISTINCTIONS

Languages: English, Mandarin
Skills: Python, R, MySQL, Tableau, VS Code, AWS, Azure, Hadoop, Spark, NLP, Time series analysis, HTML
Packages: PyTorch, TensorFlow, Scikit-Learn, Matplotlib, plotly, ggplot2, OpenCV, NLTK, Gensim, Streamlit
Certification: The securities qualification certificate (China)