

Abel Kwong

Aspiring data analyst/data scientist/software engineer
focused on data driven decision making

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Work Experience

Trading Analyst

Athol Capital Group | February 2020 - Present

- Collaborate with clients to understand their investment goals and risk tolerance levels
- Utilize equities, options, and futures to execute trades on behalf of clients
- Conduct in-depth research on various financial sectors, analyzing both technical indicators (average true ranges, volatility, relative strength) and fundamental factors (such as earnings reports and macroeconomic news)
- Monitor market trends and perform sentiment analysis using natural language processing tools, such as the FINBERT model
- Prepare regular reports on economic trends and their potential impact on financial markets
- Experience with Python and PineScript to modify custom indicators for monitoring stock market activity

Pharmacy Intern

Walgreens Boots Alliance | June 2018 - May 2020

- Managed high volume of patient prescriptions using INTERCOM Plus relational database system and MySQL
- Assist lead pharmacist with verifying accuracy of prescription orders and ensuring legal and regulatory requirements
- Compound medications involving mixing, preparing and packaging customized medication
- Met and improve weekly metrics with staff productivity and inventory turnover

Project Experience

Customer Churn Prediction Using Machine Learning | (Scikit-Learn, XGBoost)

- Utilized XGBoost to predict customer churn for a telecommunications company
- Conducted exploratory data analysis and preprocessed dataset by handling missing values and encoding categorical variables
- Engineered new features such as customer tenure and average monthly charges to improve model performance by 6%
- Achieved an accuracy score of 86% on test set, outperforming baseline model and demonstrating effectiveness of algorithm

Early Liver Cirrhosis Risk Assessment | (PyCaret, Random Forest)

- Developed predictive model to identify patients at risk of developing liver cirrhosis using PyCaret, a low-code ML library
- Utilized random forest algorithm to train model and identify the most important features using permutation importance
- Evaluated model's performance using multiple metrics including accuracy, precision, recall, and F1 score to achieve a mean score of 69.1% vs. 25% baseline
- Created a web application using Flask to deploy model and allow for easy input of new data

Skills

Programming Languages

Python, Java, SQL, R, HTML, CSS, JavaScript, C, Scala, PineScript

Libraries & Frameworks

NumPy, Pandas, Scikit-Learn, Tensorflow, Pytorch, Keras, Apache Spark, Hadoop, Flask

Tools & Platforms

Git, Github, Bash, Linux, Jupyter, Docker, AWS, Postman, Tableau, PowerBI

Recent Highlights

Deep Learning Imaging

Implement ResNet50-based deep learning model for classifying SARS-CoV2 CT scans with 96.8% accuracy

FinBert Sentiment Analysis

Predict financial data and news headlines using a pre-trained BERT natural language model with high accuracy

Education

University of Maryland

B.S. Biochemistry
2016-2019

University of Maryland - School of Pharmacy

Doctor of Pharmacy/MBA candidate
2019-2020

Interests

Financial markets, sports analytics, alternative investments, travelling, hiking, creating music