Abylay Iskakov

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EDUCATION

University of Rochester Rochester, NY
B.S. in Data Science, B.A. in Math & Statistics (**Anticipated GPA: 4.0**) August 2024 – May 2028

Relevant Courses: Data Structures & Algorithms, Database Systems, Data Mining, Discrete Math

Leadership: Events Manager at Google Developers Student Club, First-Year Representative at Data Science Club

SKILLS

Technical Skills: Python, Java, SQL, R, HTML, CSS, JavaScript, PowerBi, Tableau, Excel
Developer Libraries: pandas, numpy, matplotlib, sklearn, statsmodels, nltk, bs4, seaborn, dash, plotly
Big Data & Cloud Tech: MySQL, DataBricks, AWS, Apache Spark

WORK EXPERIENCE

ENTRANTE.NET Astana, KZ
Full Stack Data Engineer November 2022 - December 2023

- Crafted student matching algorithm using scikit-learn (NearestNeighbors) to analyze academic interests (major selection, course preferences, career goals), connecting 350+ students based on college journey compatibility
- Constructed SQL data validation system to handle text formatting and null values in student profiles, improving match accuracy by standardizing academic information and filtering inappropriate content across 600+ records

ECOMARKETPLACE Astana, KZ
Financial Data Analyst May 2023 - November 2023

- Created order tracking system using MySQL and pandas to process 50+ daily orders and generate performance analytics
- Built demand forecasting model for sales using LinearRegression to optimize inventory, reducing inventory expenses by 15%

UBER Remote
Product Developer Intern February 2022 - April 2022

- Performed ANOVA analysis revealing significant regional differences in user retention (45% variance) and operational costs
- Designed ARIMA model to forecast seasonal market demand, projecting 7% revenue increase for UberTeen New Zealand

PROJECTS

Occupancy Level Prediction Model based on Historical Attendance October 2024 - Present

- Created occupancy prediction system using RandomForestRegressor, Time Series cross-validation to help universities optimize facility usage and enhance student experience, addressing overcrowding issues, affecting thousands of people daily
- Implemented feature engineering, hyperparameter optimization (RandomizedSearchCV), achieving Mean Absolute Error of only 4 people per prediction, improving facility accessibility for over 11,000 university students

Financial News Sentiment Analysis on $BTC Price Direction August 2024 - Present

- Built a real-time cryptocurrency sentiment analysis system using Python and NLP libraries (nltk, TextBlob, vaderSentiment) to automate trading decisions and eliminate emotional bias, resulting in 71% prediction confidence rate
- Engineered an automated financial news pipeline using feedparser, pandas to collect and summarize real-time data from 14 news sources, implementing 5-minute refresh intervals for real-time market analysis
- Developed a predictive model using pandas, numpy to combine RSI, MACD, ATR with sentiment analysis, achieving 60% higher accuracy compared to sentiment-only analysis (measured by correct directional predictions in 1-hour intervals)

Machine Learning-Based Pairing Algorithm October 2024 - November 2024

- Designed a text-similarity system using scikit-learn, TF-IDF, cosine similarity to automate student-mentor pairing, processing 150+ student profiles to connect freshmen with compatible upperclassmen mentors based on academics, hobbies
- Won recognition by Fidelity Investments at Dandyhacks hackathon, pending university-wide rollout in Spring 2025

Company's Financial Health Assessment Dashboard April 2024 - July 2024

- Devised an interactive financial health dashboard using Python (Dash, Plotly) and web scraping tools (BeautifulSoup) to help investors make data-driven decisions within minutes, analyzing 30 key financial metrics across 7 categories
- Crafted an automated data pipeline to scrape and process real-time financial data from Finviz to provide instant company analysis, enabling users to assess stocks through comprehensive visualizations including radar and bar charts
- Executed a financial metric evaluation system analyzing 7 key categories (valuation, profitability, liquidity, growth), validating its accuracy by correctly identifying 94% of companies that achieved over 100% stock growth in the past 5 years