

Humoyunbek Abdukarimov

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Summary

Data Scientist, managing client projects, and organizing initiatives such as a 50-participant hackathon. Honours student at Inha University with strong academic performance and recipient of the Global Scholarship 2. Led a team in a Future Vehicle Technology competition and actively engaged in university-wide projects.

Experience

HumbleBeeAI | Incheon, South Korea

Data Scientist | Blockchain Transaction Analyst | 09/2024 - Present

- Built behavioral bot-detection systems for **Innerworks.me** using keystroke dynamics, mouse-movement patterns, session behavior, and interaction-level heuristics.
- Developed machine learning and rule-based detection pipelines to identify application-layer automation, suspicious user sessions, and bot-like behavior.
- Designed a macro-recorder session detection pipeline to identify replayed or scripted sessions based on timing patterns, repetitive interaction sequences, and abnormal behavioral consistency.
- Built fraud and automated transaction detection workflows using on-chain transactional data from **Cronos** and **Ethereum** networks.
- Engineered wallet-level and transaction-level features including transaction frequency, timing patterns, value movement, wallet interactions, and abnormal activity signals to detect automated or suspicious blockchain behavior.
- Implemented an investor churn prediction system for **IMAN(fintech startup)**, using transactional history, investment behavior, balance data, claims history, and app engagement signals.
- Developed time-based feature engineering pipelines, investor/investment-level snapshots, churn labels, and walk-forward validation to evaluate churn risk across future prediction windows.
- Trained and evaluated ML models including gradient-boosting models, baseline statistical models, and top-K ranking approaches to prioritize high-risk investors for retention actions.
- Created business-facing churn outputs such as prioritized investor lists, money-at-risk estimates, segment-level explanations, and model interpretation using feature importance / SHAP-style reason codes.
- Coordinated task distribution and technical planning within the team for behavioral analytics, fraud detection, and financial churn prediction projects.
- Built a **top mooring tension forecasting model** using historical sensor and environmental time-series data, applying lag features, rolling-window statistics, and regression models to predict offshore mooring load behavior.

Education

Inha University | Incheon, South Korea

Integrated System Engineering

- Received the Global Scholarship 2(SGCS) in 2025-1
- Led multiple university course projects, managing technical direction, collaboration, and project delivery

Projects

chrt.app - AI-assisted BI app enabling non-technical and technical users to explore data via natural-language prompts and run automated ML workflows. **University project**

- **BI and reporting:** Turns uploaded datasets into decision-ready outputs by generating visualizations, metrics, and results displays to communicate insights clearly.
- **ML workflow automation:** Automates the end-to-end ML pipeline with AI-assisted choices at key steps, including target selection, missing-value handling, encoding, transformations, PCA, model selection, train/test split, and class balancing.pastedpasted
- **Multi-mode analytics:** Supports classification, regression, and clustering pipelines, including training, evaluation, and model explainability.pastedpasted
- **Data ingestion and export:** Loads CSV/JSON/Excel (validated, up to 200MB) into pandas DataFrames and lets users download processed results and trained models

Demo: https://www.youtube.com/watch?v=AOY24_Z2qz4

Skills

Python, Pandas, Scikit-learn, SQL, PostgreSQL, Google Cloud Platform, BigQuery, Machine Learning, Graph clustering, Plotly Dash, Data Visualization

Certificates

IBM Data Science Professional Certificate

Languages

English, Uzbek