Cem Kesisoglu

EDUCATION

University of TorontoBASc Industrial Engineering

09/2019 - 07/2024 | Toronto, Canada

SKILLS

Skills — AI & Machine Learning, Algorithm Design, Data Science, Database Management

Programming Languages & Modules — Java, Python, SQL, R, Javascript, React, PyTorch, Scikit-learn, PyMC

Languages — English [fluent], Turkish [native]

PROFESSIONAL EXPERIENCE

Machine Learning Engineer

TotalSoft

Skills Used: Python, PyTorch, Scikit-learn, SQL, Pandas

- Implemented and adapted cross-lingual GPT & BERT models for support staff, targeting 30% less time spent.
- Fine-tuned a XLM-roBERTa model for ticket classification. The current iteration of the model has 85% accuracy.
- Fine-tuned Gemma3 1B/4B models for a Q&A chatbot. Built in-house QA benchmarks for automatic validation.
- Set up an ETL pipeline that ingests raw user input data from a PostgreSQL server, normalizes and transforms the data to HF compliant formatting and retrains models.

Mortgage Process Re-Engineering

08/2023 - 04/2024 | Toronto, Canada

10/2024 - present | Remote

CIBC

Skills Used: Excel, Access, SQL

- Focused on enhancing efficiency in the Mortgage Advisor Channel with a \$263 billion portfolio.
- Improved the current state processes through DMAIC methodologies and pain-point analysis.
- Organized and led events such as Kaizen sessions, conducted SIPOC analysis and VOC meetings.
- Selected solutions using a decision matrix accounting for cost and feasibility in concurrence with the client.
- Charted an implementation plan with immediate, short and long term steps to ensure a smooth handover.

Continuous Improvement Analyst

07/2022 - 08/2023 | Toronto, Canada

ATS Automation

Skills Used: Excel, Salesforce

- Developed **30+ DVM dashboards** and **450+ automated reports** in Salesforce to support different sales and service teams throughout the organization and to inform upper management through a high-level view.
- Conducted error identification and resolution of the sales forecast data used in the business review process.
- Led business review initiatives & refined process maps for Kaizens and automation, reducing workload by 80%.
- Conducted data analysis through Salesforce, Excel and JD Edwards to assist various stakeholders.

PROJECT EXPERIENCE

RPG Tracking & Optimization Dashboard

05/2025 - 07/2025

Website & Algorithm Design

Skills Used: JavaScript, Python, React, Ethers and EVM

- Created an interactive app for optimizing and calculating MMORPG stats and talents for a fully on-chain game.
- To ensure fast response times, the optimization logic uses greedy and beam-search algorithms.
- Users enter in-game indexes, which pulls data directly from the EVM smart contract to use for calculations.
- The app is used by hundreds of users with ~10K on-chain data pulls being made per week to run calculations.

MicroStrategy Acquisition Tracker

11/2024 – 02/2025

Data Analytics & Website Design

Skills Used: PyTorch, JavaScript, Pandas, React

- Created an interactive dashboard webpage for ASXN, a crypto research firm.
- Wrote a web-scraper using a BERT model to parse SEC Edgar API data for Bitcoin acquisitions by MicroStrategy.
- Made charts in JavaScript and with React to outline MSTR's NAV, Cost Basis and other key indicators.
- The scraper analyzes and generates graphs before the public announcement by parsing through 8-K form filings.

Project Leader: Game Purchase Decision Support System

09/2023 - 12/2023

Machine Learning & Optimization

Skills Used: Python, Scikit-learn, SQL, Pandas, Numpy, Excel

- Determined correlation between videogame attributes of the Steam Web API database through EDA in Python.
- Predicted game attributes through binary classifier CART models utilizing the Steam and Twitch datasets.
- Recommended game purchases using knapsack models, and randomly distributing preferences for added realism.