# TEMIRLAN KDYRKHAN

## EDUCATION

## Florida Atlantic University

Masters in Data Science and Analytics

## Lomonosov Moscow State University

Bachelor of Mathematics

## Relevant Coursework

• Generative AI • Business Analytics & Big Data • Data Structures & Algorithms

Statistics

Graduation date: May 2025

Graduation Date: May 2021

current GPA 4.0

GPA 3.25

• Deep Learning

• Data Mining & Machine Learning • Reinforcement Learning

• Applied Math

## SKILLS

• LLM, Data Mining, Big Class Imbalance, Feature engineering, Statistical analysis, Deep Q-Learning, Performance tuning, Python, TensorFlow, PyTorch, GCP, Azure, C++, SQL, Java, GIT, REST API, Unix Shell, CI/CD

#### Professional Experience

## FAU - Graduate Researcher / Student Projects

September 2023 – May 2025

- Conducted applied research in fraud detection using deep neural networks and imbalance learning techniques
- Developed and deployed AI models and web applications using Python, PyTorch, Flask, and GCP

#### FOXI Boats - Software Engineer Intern

March 2022 – September 2022

- Migrated legacy Java code to Kotlin Jetpack Compose, enhancing both usability and visual appeal.
- Reduced app crash rates by aprox. 33% through rigorous debugging and optimization of the landing page.
- Improved data retrieval by debugging SQL queries, reducing execution time by 10%

## Bank CenterCredit JSC - Software Engineer Intern

June 2021 – November 2021

- Integrated Alseco bill payment API in microservices, resulting in 20% reduction in transaction processing time.
- Boosted service efficiency through the development of optimized SQL queries, B2B operations.
- Achieved a 95% success rate in integration testing for critical services, reducing post-deployment issues.

## Prophi - Math and Computer Science Mentor

Sep 2018 – Apr 2021

• Delivered personalized instruction on the fundamentals of data structures to students worldwide.

## Project Experience

## Medicare Fraud Detection | Puthon. PuTorch. Scikit-learn. Imbalanced-learn

• Developed a Medicare fraud detection system using DNN, addressing class imbalance challenge, which was 99.97% negative to 0.03% positive cases. Achieved a 20% improvement in ROC-AUC score. View the link.

## Reinforcement learning-based AI agent in Tetris | Deep Q-Networks (DQN), Actor-Critic, OpenAI Gymnasium

• Developed a reinforcement learning-based AI agent to play Atari game Tetris. Developed **Deep Q-Networks** (DQN) and Actor-Critic for strategy optimization. View the link.

## Speech-to-Text and Text-to-Speech WebApp | Python, Flask, Docker, gcloud CLI

• Developed a cloud-based web application leveraging Google Cloud Speech-to-Text and Text-to-Speech APIs. Implemented real-time audio processing, including audio recording and text-to-speech synthesis. View the link.

## Digit Recognition System | Python, TensorFlow, PyTorch, Deep Learning, NLP

• Built CNN model achieving 99.2% accuracy on MNIST dataset. Implemented data augmentation increasing model robustness by 25%. View the link.

#### CERTIFICATIONS

- Google for Developers Central Asia, Predictive Modeling and Analytics. View Credentials
- Neural Networks and Deep Learning DeepLearning.AI. View Credentials
- Introduction to Data Science in Python, U. Michigan. View Credentials
- IBM Artificial Intelligence Fundamentals. View Credentials
- Microsoft Azure AI Document Intelligence. View Credentials