#### Contact

Palo Alto, CA (650) 279-4232 (Mobile) gtimokhina@gmail.com

www.linkedin.com/in/gtimokhina (LinkedIn)

### Top Skills

PL/SQL Microservices ASP.NET

### Languages

English (Full Professional)
Russian (Native or Bilingual)

### Certifications

Agentic Al Engineering Course Creating Multi Task Models With Keras

Machine Learning Data Lifecycle in Production

Machine Learning Engineering for Production (MLOps) Specialization Introduction to Machine Learning in Production

#### **Publications**

A Survey of Stabilizing Generative Adversarial Networks GANs in Digital Pathology

# Gulnara (Gulya) Timokhina

Al Software Engineer | Al Engineer | ML Engineer | Data Scientist San Francisco Bay Area

### Summary

Experienced Software Engineer in software development and applied AI/ML, delivering production-ready solutions that drive measurable impact. Skilled in Python, TensorFlow, PyTorch, Keras, XGBoost, LLMs, and reinforcement learning, with strong expertise in MLOps, cloud platforms (AWS, GCP), and microservices.

Accomplishments include: patented chromatographic peak classifier (95% accuracy), LLM-powered Method Miner that accelerated R&D by 40%, predictive .NET microservice reducing instrument downtime by 25%, and loan approval ML pipeline achieving 92% accuracy. Additional projects span generative AI, recommendation systems, anomaly detection, and fake news classification.

Known for reliability, problem-solving, and translating advanced Al into business value. Passionate about building scalable Al systems, optimizing performance, and advancing mission-driven innovation.

### Experience

#### Tesla

Al Software Engineer September 2025 - Present (1 month)

Fremont, California, United States

#### Thermo Fisher Scientific

Staff Software Engineer - Cloud MicroServices and Data Sciences June 2021 - June 2025 (4 years 1 month)

San Jose, California, United States

- Developed deep learning and gradient boosting models for chromatographic peak filtering, improving accuracy to 95%. Filed a patent for this innovation.
- Built an AI solution using LLMs to identify compounds and gradients for sample prep, improving data search efficiency.
- Designed a multi-output XGBoost model to predict mass spectrometry isotope patterns.

- Created a .NET service for real-time instrument data collection to enable predictive maintenance.
- Contributed to cloud-native ML deployment using Docker, Kubernetes, and AWS services.

Provident Funding Associates L.P.
Senior Software Engineer
February 2002 - May 2021 (19 years 4 months)

San Bruno, California, United States

- Designed a machine learning pipeline for automated loan approval, covering data prep, modeling, deployment, and monitoring.
- Led architecture and implementation of .NET-based lending solutions across the enterprise.
- Managed offshore development teams, setting timelines and overseeing project delivery.
- Engineered end-to-end mortgage lending software solutions to streamline loan processing and ensure regulatory compliance across financial institutions
- Collaborated with legal and financial executives to align business applications with regulatory standards and client requirements, improving crossdepartmental efficiency
- Designed and implemented core business logic for calculating APR, payment schedules, and closing costs to ensure accuracy and consistency across all loan types
- Optimized SQL Server performance and data integrity by creating stored procedures, views, functions, and triggers, resulting in faster query execution and improved database security
- Developed RESTful web services to generate compliant borrower documents
   —such as closing disclosures and loan estimates—enhancing user experience
   and reducing manual workload
- Built validation services for total loan points and fees to ensure compliance with federal lending limits, reducing regulatory risk
- Implemented a Windows service to automate the creation and secure transmission of borrower documents, decreasing delivery time by 40%
- Delivered a Windows-based packaging system for investor communication using various protocols (e.g., SFTP, HTTP), improving reliability and partner satisfaction
- Created a secure check printing solution integrated with financial systems, reducing operational delays and minimizing manual errors

## Education

San Jose State University

Master of Science - MS, Software Engineering, concentration in Data Science

Novosibirsk State University (NSU)

Bachelor of Science - BS, Applied Mathematics