

# Summary

in /khaykingleb

MLOps/DevOps Engineer with 3.5+ years of software engineering experience. Specialized in boosting model performance, reducing costs by >\$10k monthly, deploying scalable solutions to apps with >30k DAU, and optimizing data and workflow pipelines. Integrated state-of-the-art technologies across cloud and on-premise environments. Background in infrastructure, speech, natural language processing, and finance.

#### EXPERIENCE

## MLOps/DevOps Engineer at iClerk

San Francisco, USA (Remote)

Silicon Valley startup focusing on automating tedious tasks for B2B

July 2023 — Present

- Refined an ensemble model for speech-to-text and speaker diarization, achieving an 11x speedup & improved accuracy
- Developed a scalable inference pipeline with NVIDIA Triton, reducing costs by 5x for processing one-hour meetings
- o Implemented an advanced agentic RAG for efficient parsing of financial statements and insurance documents
- o Architected a K3s GPU cluster with NVIDIA GPU Operator for monitoring and validation, cutting GPU costs by >50%
- o Established IaC monitoring & alerting for 4 K8s clusters with Grafana Alloy OTel Collector, reducing downtime and errors

# ML/MLOps Engineer at NeiroAI

Tbilisi, Georgia

Generative AI startup with \$150M and \$200M B2C app exits

November 2022 — March 2024

- $\circ$  Built a REST/gRPC API for speech tasks with **priority queuing**, handling **60k+ inference requests** and per hour
- Researched and deployed state-of-the-art multilingual, emotional text-to-speech and voice conversion models in 44 kHz
- $\circ~$  Created a service for fast  $\mathbf{speech}~\mathbf{model}$  fine-tuning to any voice in  $\mathbf{under}~\mathbf{1}~\mathbf{minute}$
- Terraformized and migrated speech infrastructure to Kubernetes with >4000 lines of IaC
- Introduced MLOps/DevOps best practices to a 20+ developer engineering division

#### Data Scientist at DiviAI

San Francisco, USA (Remote)

Silicon Valley startup building a financial data aggregator for the US market

September 2021 — July 2022

- Engineered a PySpark pipeline for scraping S&P 500 news to estimate investor sentiment with BERT-like models
- o Developed ETL pipelines that aggregate data from 150+ financial API endpoints
- o Designed a listwise learning-to-rank system for stocks recommendation, enhancing long-short strategy performance
- o Adopted a Glicko rating system to rank Russell 3000 CEOs

# **PROJECTS**

# Deep Learning for Audio

- o Implemented QuartzNet, FastSpeech, and HiFi-GAN from scratch based on arXiv papers
- $\circ \ \ {\rm Applied} \ \ {\bf compression} \ \ {\bf techniques} \ \ {\bf to} \ \ {\bf keyword} \ \ {\bf speed} \ \ {\bf increase}$

#### Canonical Huffman Archiver

o Developed an ASCII archiver in C++ with Conan-based auto-build system

## **Stochastic Optimization Methods**

- o Constructed Particle Swarm Optimization for performance testing on Rosenbrock and Ackley benchmark functions
- $\circ\,$  Applied  ${\bf Genetic}$   ${\bf Algorithm}$  for solving the NP-hard Traveling Salesman Problem

## **EDUCATION**

# NRU "Higher School of Economics"

Moscow, Russia

B.S. with summa cum laude in Economics and Data Science

September 2018 — July 2022

Relevant coursework: C++, Python, R, Machine Learning 1, Machine Learning 2, Large Scale Machine Learning, Deep Learning,
Deep Learning in Audio Processing, Reinforcement Learning, Calculus, Linear Algebra, Probability Theory, Mathematical Statistics, Stochastic Processes, Econometrics, Microeconometrics, Differential & Difference Equations

### Miscellaneous

### CFA Level 1

• Passed in February 2021, scoring in the top 10% of candidates worldwide

## Teaching Assistant, NRU HSE

• Facilitated course coordination in Probability Theory, Mathematical Statistics, and Machine Learning (2020–2022)

#### SKILLS

- o Languages: Python, Rust, Go, C++, SQL, TypeScript, JavaScript
- $\circ\,$   ${\bf Frontend}:$  Remix, React, Tailwind, Vite, DaisyUI, Vercel
- $\circ\,$  Backend: gRPC, REST, AsyncIO, FastAPI, JWT, Node.js
- $\circ\,$  Builds: Make, C<br/>Make, Conan, Poetry, Pnpm, Npm
- o DevOps: Terraform, Ansible, Docker, Kubernetes, K3s, AWS, GCP, Grafana, Prometheus, Loki, Nginx, Acme, ArgoCD, CI/CD
- MLOps: DVC, NVIDIA Triton, Ollama, LangChain, TorchScript, ONNX, TensorRT, CoreML, Gradio
- $\circ\,$   $\,$   $\!$   $\!$   $\!$   $\!$  DE: Hadoop, Spark, Databricks, Polars, Kafka, Celery, RabbitMQ
- o Storage: Redis, PostgreSQL, PGVector, Sqitch, S3, R2, Supabase, Airtable
- o R&D: PyTorch, Lightning, Hydra, W&B, Scikit-learn, Numpy, Pandas, SciPy