

Narek Maloyan

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Founding AI Engineer who built the **#1 coding agent on SWE-bench Verified** (70% resolve rate). 7+ years shipping production ML systems recommendation engines, NLP, computer vision, and AI safety. 13 published papers. PhD candidate at Moscow State University.

EXPERIENCE

Zencoder Founding AI Engineer

Feb 2024 – Present

- Architected and built the coding agent that achieved **#1 on SWE-bench Verified** with a 70% resolve rate (May 2025), up from <20% when development began
- Designed core agent harness as one of several founding engineers: verification loop, N-trajectory exploration with oracle selection, and prompt optimization pipeline
- Built first versions of coding and testing agents now serving enterprise customers (SOC 2 Type II, ISO 27001 certified)
- Created **manim-web** (304 GitHub stars) TypeScript port of 3Blue1Brown's Manim, generated entirely by Zencoder's agent, featured on Hacker News front page (140+ upvotes)

Viasat Machine Learning Engineer

Sep 2021 – Feb 2024

- Developed advanced video highlights extraction method, achieving a 40% increase in user engagement
- Designed and built a movie recommendation system that boosted user engagement by 25%
- Improved semantic search hit rate by 55% and increased throughput 10x by distilling and fine-tuning a lightweight embedding model (ONNX)

TrendMD Machine Learning Engineer

Sep 2019 – Sep 2021

- Built medical article recommendation pipeline that increased click-through rate by 30%
- Created a speech-to-text model for doctor consultations, reducing note-taking time by 40%
- Applied uplift modeling to marketing optimization, resulting in 35% increase in user interaction
- Integrated multi-armed bandit algorithms for recommendation exploration/exploitation, improving Recall@10 by 25%

Burdenko Neurosurgery Center ML Researcher (Research Grant)

Jun 2020 – Feb 2022

- Built multi-model MRI analysis tool for glioma grading, providing doctors with a diagnostic second opinion (published at MEDINFO 2022)
- Developed stroke risk forecasting tool leveraging patient data and clinical parameters, leading to 50% decrease in preventable secondary strokes

ODS.AI Python Developer (Contract)

Jan 2020 – Jun 2022

- Built Dockerized evaluation pipeline for data science competitions, used across 20+ competitions with 1000+ total participants
- Coordinated ML competitions spanning NLP, computer vision, and recommender systems

ISP RAS (Russian Academy of Sciences) Software Engineer Intern

Sep 2017 – Jun 2019

- Contributed to **Svace** ISP RAS's production static analysis tool used across major software companies
- Developed tainted data analysis module for C++ code, which became the basis of Bachelor's thesis

EDUCATION

Lomonosov Moscow State University

PhD candidate in Computer Science Research: AI safety, LLM security, adversarial attacks 2021 – 2025
MSc in Machine Learning, with Honors Top 1%, gold medal. Thesis: AST-based JS engine fuzzing via neural LMs 2019 – 2021
BSc in Computer Science Thesis: Tainted data analysis via static analyzer for C++ (at ISP RAS) 2015 – 2019

PUBLICATIONS (13 papers full list on Google Scholar)

- Prompt Injection Attacks on Agentic Coding Assistants: A Systematic Analysis arXiv, 2026
- Prompt Injection Attacks in Defended Systems DCCN 2024, Springer
- Adversarial Attacks on LLM-as-a-Judge Systems (2025) · Trojan Detection in LLMs (2024)
- Generated Text Detection **1st Place**, DIALOG-22 (2022) · Glioma Grading with DL, MEDINFO (2022)

SKILLS & RECOGNITION

Technical: Python, TypeScript, PyTorch, Transformers, LLM agents, prompt engineering, ONNX, static analysis, FastAPI, Docker, AWS

Competitions: Kaggle Expert rank 107/200k (top 0.05%); 1st place DIALOG-22 RuATD; Trojan Detection Challenge (SaTML 2024)

Languages: English (fluent), Russian (native), Armenian (conversational)