

Maria Tigina

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📍 Amsterdam, Netherlands

AI engineer with **5+ years** designing and shipping agentic AI systems at JetBrains. Core maintainer of the open-source **AI agent framework** Koog (4.5k GitHub stars), contributor across the Kotlin AI ecosystem, building **MCP, A2A, and ACP** SDKs. Developer in a large-scale enterprise agentic platform, owning **agent integrations**. Author of blog posts and research papers on LLM evaluation and benchmarking, and a regular voice in the framework's community channels and at conferences.

Core Competencies

SDK & Protocol Engineering

SDK design & maintenance, AI agent frameworks, MCP / A2A / ACP protocols, tool-calling & structured output, multi-provider LLM integration, on-device & local models, Kotlin, Java, Python, TypeScript

Developer Experience & Community

API design, technical documentation & blog posts, open-source maintenance, developer relations, framework/tooling integrations, competitive analysis, release management, public speaking

Work Experience

JetBrains

Software Engineer, JetBrains AI

Amsterdam, Netherlands

December 2023 – present

- Core maintainer of the open-source Kotlin AI agent SDK [Koog](#) (4.5k GitHub stars), adopted by enterprise teams including [Mercedes-Benz](#), [GoodData](#), [iShape](#), and [AutoDev](#), now integrated into [Spring AI](#); own the SDK roadmap, competitive research, and release process & CI/CD pipelines
- Led cross-framework interoperability: designed and shipped support for the MCP, A2A, and ACP protocols, supported multi-provider LLM client, and drove a partnership with [Google AI Edge](#) that shipped local, on-device model support
- Advanced the [Kotlin MCP SDK](#) to second-tier ecosystem adoption; added multi-session support and designed & implemented a notification pipeline to reach full spec compatibility
- Represent the SDK externally: talks and workshops on AI agents at [KotlinConf](#), [KotlinConf BE](#), [DMCC](#), [W&B Meetup](#), Constructor University, and Neapolis University; authored blog posts on [A2A](#), [ACP](#), and [Spring AI](#)
- Delivering end-to-end [GitHub Copilot](#) and [Cursor](#) agent integrations for [Air Cloud](#), enterprise agentic development platform
- Built and evaluated agentic AI features for [JetBrains IDEs](#) (code review, environment setup, project generation)

Skills: AI Agent SDKs, Transport Protocols, MCP, ACP, OTEL, CI/CD, Docker/Kubernetes, Kotlin, Java

JetBrains

R&D Engineer, JetBrains Research

Belgrade, Serbia

July 2021 – November 2023

- Designed evaluation pipelines for AI agents across software engineering tasks; studied on-device agentic models' capabilities; explored tool-calling format customization for various agentic LLMs ([HuggingFace](#), [GitHub](#))
- Built an open-source LLM benchmark for code-related tasks; collected an SWE dataset for Java, Kotlin and JS with more than 20k datapoints; performed evaluation on the top 20 LLMs ([HuggingFace](#), [arXiv](#))
- Conducted a large-scale analysis of interaction patterns and coding trends for [Stepik](#) and [Hyperskill](#) MOOC platforms
- Developed a headless IntelliJ IDEA-based [framework](#) for Kotlin language features analysis using GitHub data
- Published 5 research papers at A/A* international conferences: [MSR'22](#), [ICSE'23](#), [ITiCSE'23](#), [ICSE'24](#), [Koli Calling'24](#)

Skills: Benchmarking, Evaluation, LangChain, ML&DL, AWS, Data Analysis, Python, Kotlin

Google

R&D Intern, Fit & Wear Research

London, UK (remote)

July 2020 – October 2020

- Explored the efficiency of a [Bluetooth GATT](#)-based Heart Rate Peripheral Service on Wear OS, benchmarking its latency against conventional protocols for transmitting health data to fitness equipment
- Conducted a study on auditory-paced training by emitting rhythmic beeps during walking and running sessions and collecting biometric data to evaluate users' ability to synchronize movement tempo with audio cues

Skills: Kotlin, Python, Android, BLE, GATT, IMU, Wear OS, Data Analysis

Yandex

Software Engineering Intern, Market Infrastructure

Moscow, Russia

June 2019 – August 2019

- Automated database updates and rollbacks by migrating scripts to cloud job runners

Skills: SQL, Bash, DevOps, TypeScript/JavaScript, React, Java

Education

National Research University ITMO

St. Petersburg, Russia (remote)

Master's in Big Data and Machine Learning

2021 – 2024

Key courses: Data Analysis and Visualization, Statistics, Machine Learning, Deep Learning, Big Data Infrastructure, Evolutionary Computing

Higher School of Economics

St. Petersburg, Russia

Bachelor's in Applied Mathematics and Computer Science

2017 – 2021

Key courses: Algorithms and Data Structures, JVM Programming Languages, Android Programming, Probability Theory, Numerical Methods, Computer Networks, Database Management Systems, Introduction to Machine Learning

Publications

- [Introducing Koog Integration for Spring AI: Smarter Orchestration for Your Agents.](#) *JetBrains Blog*, 2026
- [Koog x ACP: Connect an Agent to Your IDE and More.](#) *JetBrains Blog*, 2026
- [Long Code Arena: A Set of Benchmarks for Long-Context Code Models.](#) 2025
- [Clustering MOOC Programming Solutions to Diversify Their Presentation to Students.](#) *Koli Calling'24*
- [Bridging Education and Development: IDEs as Interactive Learning Platforms.](#) *IDE@ICSE'24*
- [Detecting Code Quality Issues in Pre-written Templates of Programming Tasks in Online Courses.](#) *ITiCSE'23*
- [Analyzing the Quality of Submissions in Online Programming Courses.](#) *ICSE-SEET'23*
- [Lupa: A Framework for Large-Scale Analysis of Programming Language Usage.](#) *MSR'22*