

Liudmila Kornilova

Software Developer

Berlin, Germany

github.com/kornilova203

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Skills

Java, Kotlin, concurrency, database management tools, memory and performance profiling

Talks

MongoDB Tools Everywhere

MongoDB World 2020

mongodb.com/presentations/mongodb-tools-everywhere

Max Marcon, Liudmila Kornilova

Presented the latest additions and enhancements to the ecosystem of tools for MongoDB including new Java driver.

Personal Projects

Matlab/Octave support for JetBrains IDEs

github.com/kornilova203/matlab-IntelliJ-plugin

Plugin adds support for Matlab and Octave languages. It provides syntax highlighting, code completion, resolve, refactorings.

Education

ITMO University Saint Petersburg, Russia

2014 - 2018 bachelor

Faculty of Software Engineering and Computer Systems

Bachelor's thesis: Computer Search of Distributed Algorithms

github.com/kornilova203/synthesis-of-local-algorithms

Aalto University Helsinki, Finland

2017 - 2018 exchange student

Department of Computer Science

Experience

JetBrains | Senior Software Developer

September 2018 - present | Berlin, Germany

IntelliJ Core - Indexes team

- Currently working on speeding up IDE startup by eliminating the need for scanning of the virtual file system during launch. This involves working with concurrent code, writing concurrent data structures, optimizing code performance.

DataGrip team (IDE for databases)

- Implemented [MongoDB integration](#) which included development of a JDBC driver and support for [document data editing](#). Re-implemented DML code-generator to make it easy to add new code generator for any database scripting language.
- Collaborated with MongoDB team and created a Java driver that executes MongoDB JavaScript commands. Java ↔ JS interop.
github.com/mongodb-js/mongosh
- Made DataGrip data editor reusable for other IDEs (DataSpell, Kotlin Notebooks). This involved coordinating design decisions across multiple teams and conducting significant code refactoring.
- Implemented [Full-text search](#) that helps users to find data in a database.
- Implemented Cassandra and Hive integrations: SQL dialects, resolve, introspection.
- Redesigned [import UI](#) and implemented an ability to [copy multiple tables at the same time](#).
- Was a mentor to interns. One of my intern's projects was [SQL for MongoDB](#).

Google Summer of Code | Scala Native | Intern

May - August 2018 | Remote

github.com/scala-native/scala-native-bindgen

Implemented Scala Native Bindings Generator. Bindgen parses a C header file and generates Scala class that allows to call native libs from Scala Native code.

Eniram | Software Developer

March - May 2018 | Helsinki, Finland

Developed internal-use software that gives access to data collected from cargo ships and calculates various aggregates.

JetBrains | Intern

June - August 2017 | Saint Petersburg, Russia

github.com/kornilova203/FlameViewer

Implemented instrumentation Java profiler and a tool that visualized data collected by different profilers.