Liudmila Kornilova

Software Developer
Berlin, Germany

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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.

Skills

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

Also worked with: C++, Python, JavaScript, concurrency

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 | DataGrip team | Software Developer

September 2018 - present | Berlin, Germany

DataGrip - a cross-platform IDE for databases.

- MongoDB integration. Implemented JDBC driver and supported document data editing. Re-implemented DML code-generator so now it's easy to add code generation for any database script language.

- Collaborated with MongoDB team and created a Java driver that executes MongoDB JavaScript commands. Java ↔ JS interop.

  github.com/mongodb-js/mongosh

- Full-text search that helps users to find data in database. It generates correct predicates for lots of different data types and uses search indexes.

- Cassandra, Hive integration: SQL dialects, resolve, introspection.

- Redesigned import UI and implemented an ability to copy multiple tables at the same time.

- Lot's of table data editor and performance improvements.

- Interns mentorship. One of my intern's projects was SQL for MongoDB.

Google Summer of Code | Scala Native

May - August 2018 | Remote
github.com/scala-native/scala-native-bindgen

Implemented Scala Native Bindings Generator. Bindgen parses 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 profilers.

- Profiler uses ASM library for Java bytecode manipulation.

- Protobuf is used for data serialization and client-server communi- cation.

- Web application visualized data on canvas, it is faster that divs or svg graphics.