PAVELKOVALENKO

Junior Java Software Developer

EDUCATION —

SPbSTU | Bachelor of Software Engineering

2020 - 2024

- **GPA**: 4.7
- What was studied: DBMS, Microservice Architecture, Client-Server Applications, Programming of Microcontrollers, Networks and Telecommunications, System Design, Machine Learning & Neural Networks, Project Management
- Stack: Java, PostgreSQL, Spring (Boot, Web, Data JPA, Security), REST, Docker/Docker Compose, Python, C++, Matlab

Technopolis | Java-developer of high-load applications

2021 - 2023

- **GPA**: 4.6
- What was studied: SQL/NoSQL, HighLoad, Application Profiling, Machine Learning, Mobile Development, Basic Frontend (HTML, CSS, JS/TS), Information Security & Blockchain, Testing
- Stack: Java, MS SQL, Apache Cassandra, Apache Spark, Apache Zeppelin, Apache Kafka, Apache Airflow, Hadoop, Scala, Solidity, Selenium/Selenide, Espresso/Kaspresso, Kotlin

EXPERIENCE (TOTAL - 1 YEAR 3 MONTHS) —

Dzen | Java Developer Intern

March 2023 - July 2023 (4 months)

Stack: Java, YQL, YDB, Yandex.Monitoring, Apphost, Python, Jira / Yandex.Tracker I developed a news feed for dzen.ru. In more detail what did I do:

- I created a monitoring and alert system for the service to monitor its performance
- I conducted several A/B experiments that have shown a lack of demand for some functionality from users
- I added some **offheap fields** and sent them through several services working with **APIs** and changing them
- I implemented a **container of widgets** (weather, geoposition, rates of currencies, etc.) for simplifying the adding of new ones
- I also wrote automatic Python scripts to refactor a huge amount of similar code (6k+ lines)
- In addition to the routine task flow, I **created a documentation** about monitoring systems, entities and its communication in Dzen at all that my colleagues used
- Sometimes I organized the entire project team in Scrum StandUps

Technopolis | Java Developer

Feb 2023 – June 2023 (5 months)

Stack: Java, Spring (Boot), PostgreSQL, TamTam API, robbi.ai

I developed a graduation project «RandomCoffee Bot» in the team according to the Odnoklassniki business case to increase social communication within the company. In more detail what did I do:

- I created a PostgreSQL database class interface to organize and access all application data
- I added the ability to **save the history of user connections** to improve the quality of the search for interlocutors
- I **refactored a code** to improve its readability

SPbSTU | Python Developer

Feb 2022 – June 2022 (5 months)

Stack: Python (PIL), SQLite, Telegram API, Docker

I developed a Telegram bot in the team according to the Belorusskaya Cosmetika business case to protect photos from plagiarism in the Internet. In more detail what did I do:

- I created a SQLite database class interfaces to organize and access all application data
- I added the processing of photo archives
- I prepared the documentation for the project
- I **interacted with the customer** and looked for a common language to solve problems with him

SPbSTU-based factory | Java Developer Oct 2021 – Jan 2022 (4 months)

Stack: Java, Spring (Boot, Web, Data JPA, Security), HTML, CSS, JS, DeepSource

I developed a Tracking System in the team according to the SPbSTU-based factory business case to track the progress of work on the machines by the employees of the enterprise. In more detail what did I do:

- I implemented a **global timer** to see the current time in UI
- I implemented **some endpoints** of the system server
- I **interacted with the customer** and looked for a common language to solve problems with him

PROJECTS -

Technopolis | Java Developer

Feb 2022 - Dec 2022

Stack: Java, Cassandra, Lua, JUnit, one-nio, wrk2, async-profiler

I developed my own NoSQL DB by myself as part of the VK educational project,
Cassandra was taken as a prototype. In more detail what features did I do:

- As a basic part of DB, I added Persistency to save data, Range queries with binary search and Compaction to remove old data
- As a part of network communication with DB, I added HTTP REST API to get data by endpoints, Asynchronous server to unload SelectorThreads, Sharding to up horizontal scalability, Replication to ensure fault tolerance, Inner Asynchronous communication within the cluster nodes, Range queries with HTTP Chunked Response
- Also I profiled my DB and tested its performance actively, and got detailed feedback from experts after each feature

SKILLS -

Technical Java, Spring (Boot, Data JPA, Web, Security), PostgreSQL, Cassandra, Docker, Python, C++, Yandex.Monitoring, Jira

Language English - B1

READING LIST —

Robert C. Martin «Clean Code»

CERTIFICATION & AWARDS -

2024 EF SET English B1 Certificate

2023 Technopolis Graduation Certificate

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