

DMITRII KARPEEV

Senior/Lead Software Developer



Location and Contacts

Location: Moscow, Russia

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Summary

- 15+ years of professional expertise
 - Solid knowledge of software architecture best practices
 - Senior level of object-oriented analysis and design
 - Team coordination and management
 - Expert level in .NET/C# development (.NET, ASP.NET, ASP.NET MVC, .NET Core, ASP.NET Core, Visual Studio IDE)
 - Strong knowledge of Python technology Stack (Flask, Django, Pandas, NumPy, etc.)
 - Web applications back-end development
 - REST API services development
 - Full stack development
 - Data access layer design and development (Entity Framework, ADO.NET, MS SQL Server, MongoDB)
 - Strong math and algorithmic background (optimization, graphs)
 - Machine learning and Natural language processing expertise
 - Good knowledge of Web-application security fundamentals (safe coding, cryptography)
 - Good theoretical knowledge of Blockchain technology
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Education

- PhD, Technical science. Voronezh State Technical University, Russia
 - MS, Information security. Voronezh State Technical University, Russia
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Certificates

- Moscow Institute of Physics and Technology & Yandex. Math and Python for Data Analysis. <https://www.coursera.org/account/accomplishments/certificate/3578CP4TFG8K>
- Machine Learning by Stanford University. <https://www.coursera.org/account/accomplishments/certificate/5PDZ6GRGU7RC>

Upwork.com Profile

Link: <https://www.upwork.com/freelancers/~014a7b7441fafaced>

Career

- United Nations Office at Vienna, Senior Software Engineer Apr 2019 – Apr 2022
 - Freelance, Software Developer (via Upwork.com) Oct 2018 – Apr 2019
 - DataArt Solutions, Inc. Senior Software Developer May 2010 – Sep 2018
 - Argussoft International, Senior Software Developer 2009 – 2010
 - Freelance, Software Developer 2007 – 2009
 - RuSoftware, Software Developer 2005 – 2007
 - Goodwin Agency, Software Developer 2003 – 2005
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Recently completed projects

The United Nations Terminology Database (<https://unterm.un.org/>)

Customer: Department for General Assembly and Conference Management at United Nations

Description:

This database is a linguistic tool created primarily to facilitate the work of United Nations staff members and other people around the world who participate or are interested in the Organization's activities. UNTERM portal provides terminology and nomenclature in subjects relevant to the work of the United Nations.

Technological stack:

C#, .NET Core 2.2/3.0, ASP.NET Core REST API, Entity Framework Core, MS SQL Server 2017, Elastic Search, NEST, Azure DevOps, TFS, Vue.js

Role:

Senior software engineer responsible for creating new database structure and migration data using the new Data Access Layer based on Entity framework Core. Team coordination during the migration process. The second responsibility was UNTERM next generation UI application development (full stack).

Universal Recommender System (customer undisclosed)

Description: universal service which is created for providing highly customizable recommender system based on a set of user specific algorithms and methods. It provides an ability to choose suitable method of recommendations for every customer. The application utilizes modern approaches in the field of Machine Learning and Artificial Intelligence algorithms. All the services are available through REST API.

Technological stack:

Python 3.x, Flask, TensorFlow, SciPy, NumPy

Role:

Main developer responsible for requirements analysis and implementing the system core including AI and ML algorithms.

Video Management System Reporting Tool (customer undisclosed)

Description: application designed to monitor the status of a group of servers of a Video Surveillance Management System in real time. The application consists of Monitoring Server which is a Windows service gathering data from Video Management Servers (VMS), UI part as a Milestone XProtect Management client Plugin and API part which provides access to the stored VMS status data. The application allows to create historical reports on and monitor VMS status in real time.

Technological stack:

Milestone Integration Platform SDK, Milestone XProtect, C#, .NET Core 2.1, ASP.NET Core REST API, Entity Framework Core, MS SQL Server 2017, Git

Role:

Solution Architect/Lead Developer responsible for the design of the application, managing business requirements, communication with the Customer

Mass notification service (customer undisclosed)

Description:

A multiuser notification system. The main purpose of the system is to inform customers about different types of events. It is highly customizable system which performs mass notification of the subscribed users. Different components of the system use a system Web API which is developed for processing requests for notifications and system management.

Technological stack:

C#, .NET Core 2.0, ASP.NET Core REST API, MS SQL Server 2016, Angular 4, Docker, GitLab CI/CD

Role:

Senior software developer responsible for ASP.NET Core REST API implementation and docker configuration

Internal Blockchain Asset Management Tool (customer undisclosed)

Description:

A portal for internal asset management. This portal is an independent frontend application built on JS/React, which interacts with a standalone Java REST API application as a backend. On the server side the application uses a blockchain system (Hyperledger) as a primary storage for asset transactions.

Technological stack:

JavaScript, Node.js, React, Redux, Hyperledger 1.0, Java REST API, Docker, Git, GitLab

Role:

I performed frontend application development and backend code review

Market Data Collecting Service (customer undisclosed)

Description:

A multifunctional market data collection and distribution service. This service provides a range of methods of financial and market data collection using the trader emails and other sources. The customers of the service use the collected data for market analysis and investigation. The service uses several distinct technologies of data recognition. The main source of the data is queues of emails containing trading data. It is a distributed system, which contains several nodes connected with each other. A set of nodes can work with a huge number of incoming queues. The service also has an internal tool with UI for data editing and system maintenance.

Technological stack:

C#, Microsoft .NET Framework 2.0/3.5/4.5/4.6, WCF, Rx .NET, Threading, WinForms, MS SQL Server 2012

Role:

Senior software developer responsible for service design and implementation

Hedge Fund Risk-Management Software (customer undisclosed)

Description:

Professional asset management software for financial statistics comparison, calculations and risk-management. The software uses Bloomberg API to update current data and store it on the company's database. It allows searching and comparing historical data for different companies, and it can be used for getting forecast data for financial statistics. The software has rich UI, which helps to visualize data comparison and forecast.

Technological stack:

C#, Microsoft .NET Framework 4.0, Entity Framework, WPF, ASP.NET, MS SQL Server 2008

Role:

Senior Software Developer responsible for the Project implementation

Payment Transactions Processing Service (customer undisclosed)

Description:

A web-service, which is aimed to maintain highly reliable transaction processing. It serves global online retail portal with thousands payment transactions per second. This service handles requests for payment transactions, manages transaction queues and interacts with payment gates. The service designed for handling several transaction queues simultaneously. The most important goal of the service is to guarantee small response time under the high load. The global retail service interacts with it as with a universal payment gate.

Technological stack:

C#, Microsoft .NET Framework 4.0, WCF, Quartz.NET, .NET Threading, SVN, MS SQL Server 2008

Role:

Senior Software Developer responsible for service implementation

Home Banking Portal (customer undisclosed)

Customer:

Prepaid cards banking company

Description:

Mobile edition of a home banking portal build on ASP.NET MVC 2.0 / MS SQL Server 2008 with rich content management & reporting subsystems, and a direct API to a card processor. The portal provided a set of useful functions accessible for a user who is being mobile; this set included binding an existing credit card to the operated account, depositing funds on the account, performing easy to use payments for various services.

Tools:

C#, Microsoft .NET Framework 3.5, ASP.NET MVC 2.0, MS SQL Server 2008

Role:

Senior developer responsible for the design and implementation of the home banking portal's mobile version.