

# RUSTAM ISANGULOV

SENIOR SOFTWARE ENGINEER | SOFTWARE ARCHITECT | PHD

## PROFILE

Senior engineer with a strong interest in building and delivering software systems that help make better decisions, turn them into actions and bring measurable impact. Comfortable and experienced in delivering solutions that involve complex domain logic and mathematical modelling.

10+ years of experience in all aspects of software development life-cycle, and working with diverse, cross-disciplinary (science, software, operations) engineering teams in the UK, USA and China.

## EXPERIENCE

**SOFTWARE DEVELOPMENT ENGINEER**, AMAZON PRIME VIDEO UK – OCT 2022- MARCH 2023

I took full ownership of metadata downstream API optimisation and its efficient utilisation projects within the Prime Video Living Room Client team.

I have designed, implemented and deployed into production a data-fetching API optimisation that simplifies client calls and minimises network usage between the Prime Video app and downstream services. This feature is called more than 2 million times per day at peak times.

During the next project, I delivered a rationalised structure for metadata distribution to several components within the Prime Video app. The new structure establishes a longer-term pattern for managing different types of metadata, consolidates interaction with downstream services and facilitates more effective implementation of new features.

**PRODUCT MANAGER**, INTELLISENSE.IO CAMBRIDGE UK – 2020-2021

I was delivering product roadmaps, feature specifications and requirements for the brains.app, an industrial AI SaaS platform for mining industry. I was leading the "platform" scrum team (~12 engineers) to deliver core platform features to internal and external clients.

**SOLUTIONS ANALYST**, SLB, BEIJING CHINA – 2018-2020

I was driving the exploration and analysis of automated planning needs for the well engineering platform (DrillPlan) and investigated potential applications of classical AI planning to improve consistency and procedural adherence.

**PROJECT MANAGER**, SLB, HOUSTON USA – 2015-2018

I led a team of ~12 engineers to deliver a new decision management and execution system for drilling fluids workflows. I was driving the design and development of the multi-domain logical inference to ensure the new product is well integrated with the drilling automation (see below) and a higher level workflow orchestration systems.

**PROGRAM ARCHITECT**, SLB, HOUSTON USA – 2013-2015

I defined the vision, created architecture, set technical direction and delivered the drilling automation system that is now a part of the well-construction platform (DrillOps). Provided technical leadership for ~30 engineers to ensure a shared understanding of the vision and architecture, and their effective implementation. I was leading the collaboration with King's College London researchers to deliver the first drilling automation solution based on classical AI planning.

**SENIOR RESEARCH & DEVELOPMENT ENGINEER**, SLB CAMBRIDGE RESEARCH UK – 2004-2013

I owned a number of research and development projects in the Monitoring and Control Group, mainly delivering solutions and proof of concept systems for industrial automation, process optimisation, and classical AI planning applications.

## EDUCATION

Imperial College London, UK — PhD, Applied Mathematics

Moscow State Technological University “Stankin”, Russia — Engineering Diploma (~MS), CAD/CAM Systems & Applied Mathematics

## SKILLS

- Kotlin (backend) / JUnit / Mockk / JavaScript / TypeScript / React / Redux / Jest
- Java 11 (OCP, May 2022) / JUnit / Mockito / Maven / Spring
- C# / Matlab / C++ / SQL / Python
- Rational UML Modelling / Planning Domain Definition Language
- Git / GitHub / Aha! / Jira / Microsoft VSTS

## PATENTS

- Method of Creating and Executing a Plan (US11542787B2)
- Systems and methods for executing a plan associated with multiple equipment by using rule-based inference (US11288609B2)
- Well Construction Management and Decision Support System (US10920565B2)
- Automated sliding drilling (US10883356B2)
- Method and system for directional drilling (US10612307B2)
- Method for calculating and displaying optimized drilling operating parameters and for characterizing drilling performance with respect to performance benchmarks (US10316653B2)

## PUBLICATIONS

- Optimizing ROP through automation (Drilling Contractor, Sep 21 2011)
- Increased Rate of Penetration Through Automation (SPE-139897-MS)
- A mathematical model of an oil and gas field development process (European Journal of Applied Mathematics, Mar 8 2010)

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