Computation project

with algorithms on R/Java

About

WaveAccess is a results focused software development company that provides high quality software outsourcing services to hundreds of emerging and established companies globally. We use our technical expertise to increase business efficiencies, optimize slow or unreliable systems, recover projects that have gone off track and bring ambitious ideas to life.

19
years of delivering
successful outcomes
for customers

400+
talented and passionate
professionals
in 4 countries

4
global R&D centers
and almost any
technology

20+
industry verticals
from banking
to healthcare

300+
successful projects
delivered and counting

96%
customer
satisfaction index

Awards and Recognitions

Gold
Microsoft Partner
Microsoft

Microsoft Partner
Microsoft
2018 Partner of the Year
Artificial Intelligence Award
2017 Partner of the Year
Business Analytics Award

Microsoft Partner
Microsoft
2019 Partner of the Year
Media & Communications

IBM Registered Business Partner

Microsoft Partner Network
WORLDWIDE
DYNAMICS PARTNER
OF THE YEAR
2009, 2010, 2011 & 2016

GDPR

Information Security
DQS
ISO/IEC 27001

SCI-TECH AWARDS
(ACADEMY OF MOTION PICTURE
ARTS AND SCIENCES)

Project Overview

Project Description

Many of the projects that we have implemented are based on some computation core that was designed or developed by our customer from pharma or a similar scientific intensive industry.

As input, we usually have some prototype on R or Java that needs to be integrated into the solution with the following requirements:

- Web interface with a user friendly process for data input
- Integration with relational, NoSQL, or vector storage
- Interactive results visualization

Project Stages

At the beginning, the WaveAccess team obtains code ownership of the algorithm to understand the business goals of the whole project and the aspects of the computing workflow. Often this means having direct dialog with scientists and sometimes reverse engineering if the original author cannot participate in the project.

As a second step, we perform several meetings with the user group to formulate the user interface requirement based on the vision of how the app should work from the end user perspective. Based on the performance and platform requirements, the project team decides to refactor/rewrite the algorithm on another technology or use the original version.

The next step is a scalable algorithm execution implementation:

- Tasks queue
- Single or parallel tasks execution
- One server or cluster running
- Execution time scheduling

Integration with some data storage is required for input data and results delivery, storage technology platform is always varying – Oracle, PostgreSQL, MySQL, MongoDB, Virtuoso, or Neo4J. Results visualization depends on the algorithms output: graphs, line graphics, heat maps, boxplots, clusters, etc.

The Result

As a result, the customer has a solution integrated with existing storage and delivers algorithms output for end users. The solution provides for the quick processing of large amounts of data and performs an interactive visualization of the results. It also has a user-friendly interface based on carefully collected requirements and workshops and optimized for multiple scientific teams.

WaveAccess
We Make IT Easy

If you have a project for us,
please get in touch

scientific@wave-access.com

Skype: wave_access

+1 866 311-2467