

Applied
Machine Learning

and AI. Scientific
Computing for Business

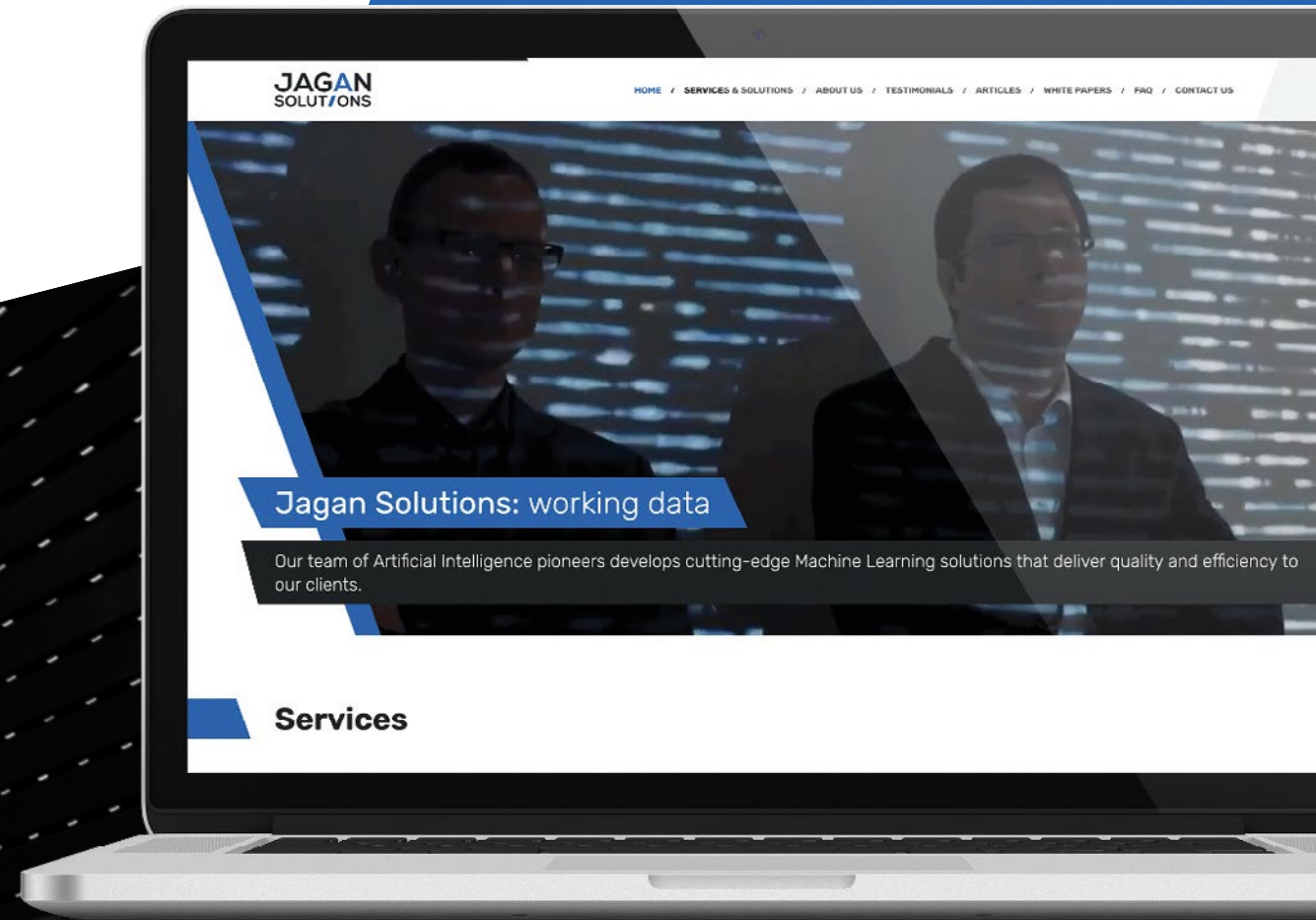
Jacek Aleksander Gruca



Find out what we can do
for your business

Jagan Solutions: working data

Our team of Artificial Intelligence pioneers develops cutting-edge Machine Learning solutions that deliver quality and efficiency to our clients.



Find out what we can do for your business

Services



Artificial
Intelligence



Machine
Learning

We harness the power of cutting-edge AI models to deliver innovative solutions in Intelligent Visual Processing, Automated Language Processing, and AI-Powered Content Generation.

Find out what we can do for your business

From medical diagnoses to predicting equipment failures, Jagan Solutions' Intelligent Visual Processing solutions unlock the power of intelligent sight across industries.

From understanding your customers with sentiment analysis to optimizing document workflows, Jagan Solutions' Automated Language Processing unlocks the power of words.

From structured data visualization like dashboards to personalized content that resonates, our AI-Powered Content Generation tools empower you to craft material that truly stands out.



Intelligent Visual Processing

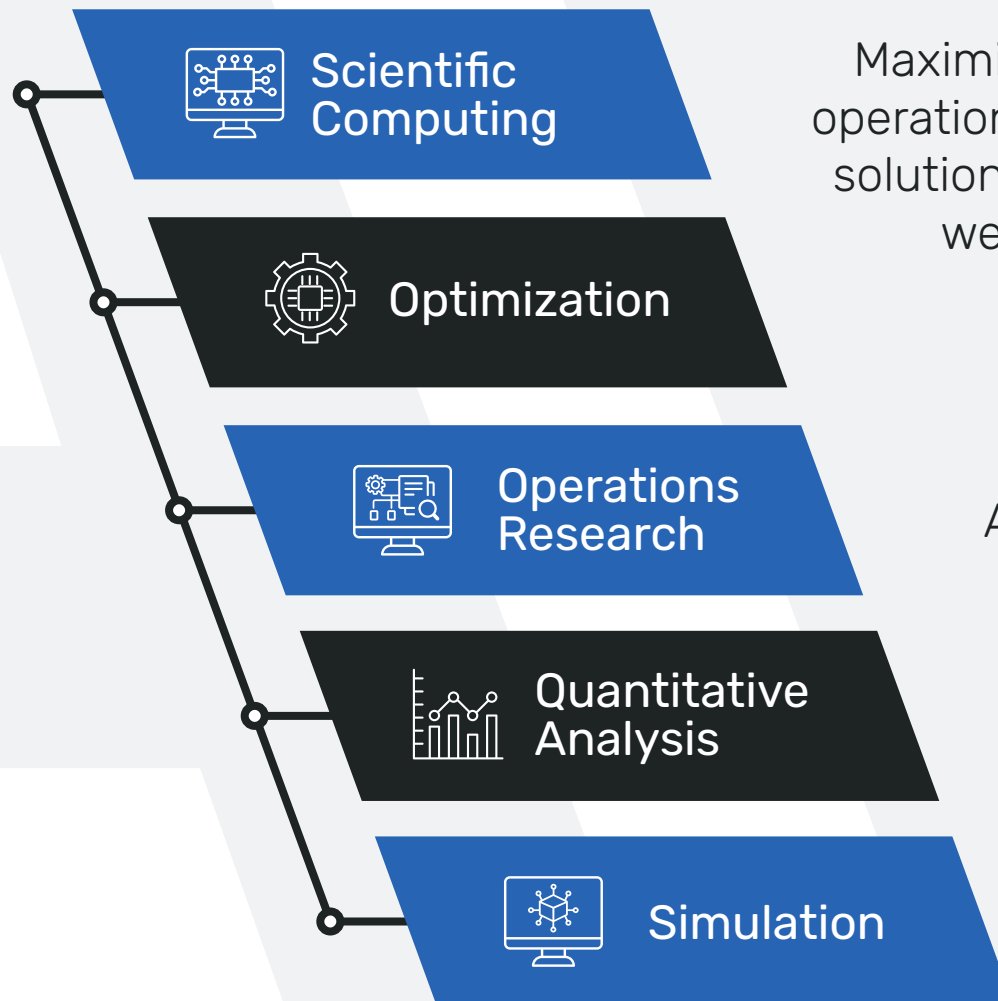


Automated Language Processing



AI-Powered Content Generation

Find out what we can do for your business



Maximize profits, minimize risk, and optimize your operations with our advanced Scientific Computing solutions. Harnessing state-of-the-art algorithms, we help businesses like yours solve problems such as Creditworthiness Assessment or Risk Optimization.

Our Operations Research and Quantitative Analysis capabilities offer essential insights to assist your decision-making, providing targeted support for smarter, strategic business choices. Additionally, we run Simulations to test various scenarios and mitigate potential risks before you take action.

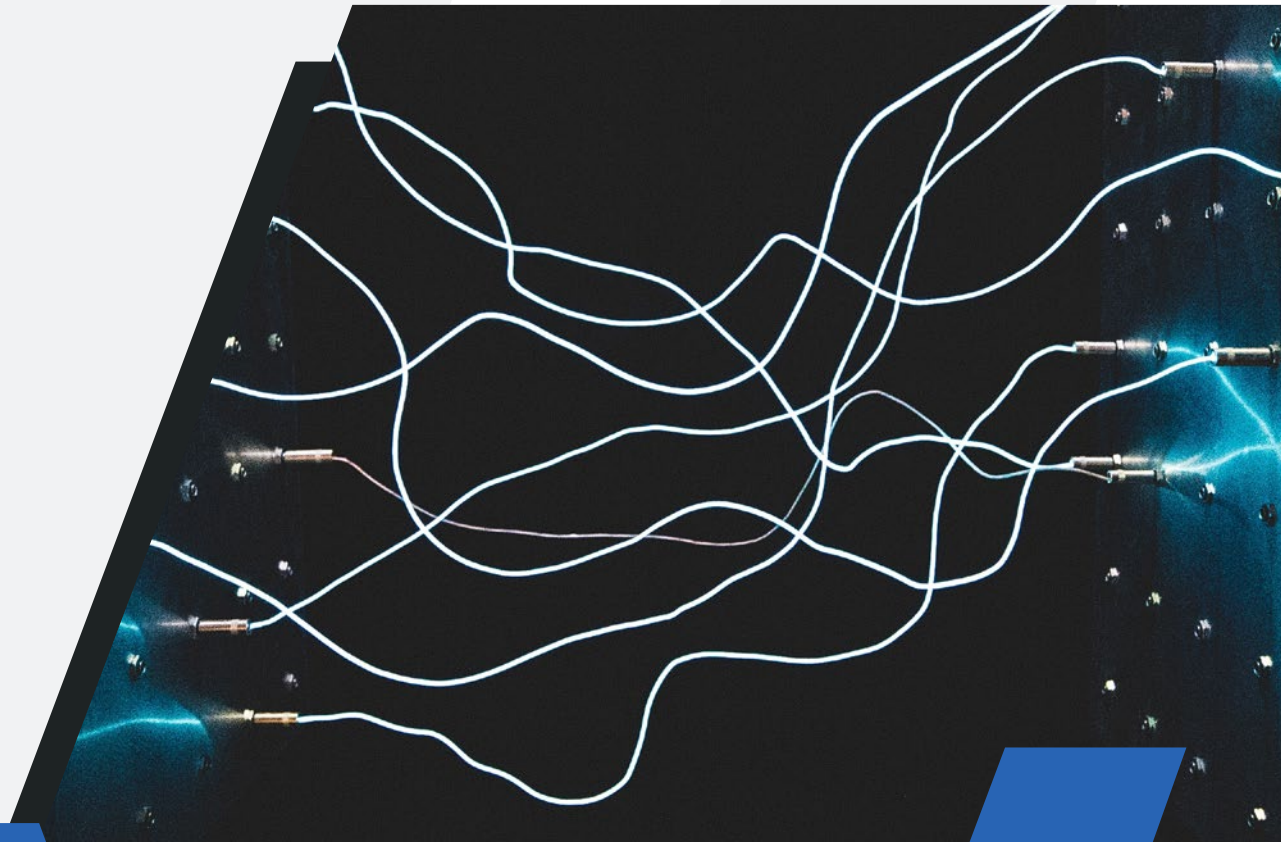
Find out what we can do for your business



Integration with
your infrastructure

As we practice the art and science of AI, Machine Learning, Optimization and much more, we learn about your systems in order to tailor the delivery of our software to your needs.

We adapt to both cloudbased and in-house systems.



Find out what we can do for your business

Solutions



Creditworthiness
Assessment



NLP of Unstructured
and Semi-structured Data



Fraud Detection
in Health Insurance

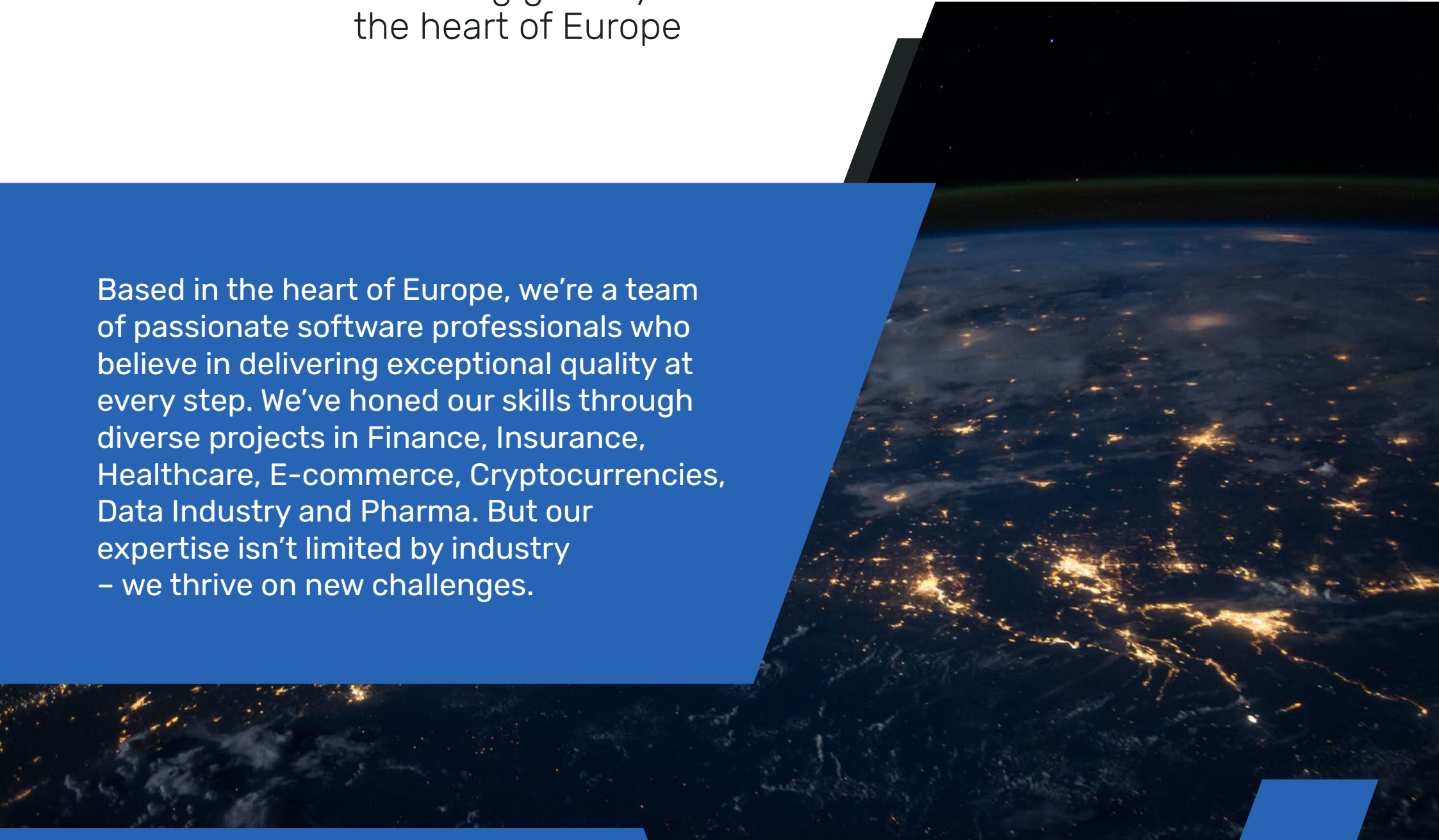


Intelligent Visual Processing
Face Reenactment

About Us

Reaching globally from
the heart of Europe

Based in the heart of Europe, we're a team of passionate software professionals who believe in delivering exceptional quality at every step. We've honed our skills through diverse projects in Finance, Insurance, Healthcare, E-commerce, Cryptocurrencies, Data Industry and Pharma. But our expertise isn't limited by industry – we thrive on new challenges.



About Us

Reaching globally from
the heart of Europe

We believe in building trust through open communication and a can-do attitude. We don't just write code, we recommend the right technologies, navigate complexities, and become an extension of your team.

Let's turn your ambitious vision into reality. We're dedicated to transforming opportunities into your success stories. Contact us today and discover how our expertise can empower your business.



More than just
developers, we're
your tech partners.


About Us

Our experience involves software solutions in:



Watch two of our team members
in a bit of our daily routine

Jagan Solutions at work

 [Watch our video](#)



Natural Language Processing of Unstructured Data

Case Study 1

Automated Data Preprocessing with Machine Learning NLP

Client: Ivy Data (Tacoma, Washington)

Challenge

The client's users submitted CSV files containing individual information (names, addresses, phone numbers) to request specific data points. The existing system lacked in efficiency and occasionally required human intervention to process the data.

Solution

We developed a Machine Learning (ML) solution using Natural Language Processing (NLP) to automate data retrieval.

The system

Preprocesses submitted CSV files

Converts them to a standardized format compatible with backend processing.

Extracts relevant data points

Utilizes NLP techniques to efficiently extract specific user information like address, phone number, and postcode.

Leverages cloud infrastructure

Employs Google Cloud Platform and TensorFlow for scalable and efficient processing.

Ensures accuracy

Achieves as much as 99% accuracy through rigorous model training and tuning!

Benefits

Improved efficiency

Automates data retrieval, significantly reducing manual effort and processing time.

Enhanced user experience

Enables users to receive requested data instantly.

Scalability

The cloud-based solution ensures smooth handling of increasing data volumes.

Positive feedback

We received excellent feedback from the client, highlighting the project's success in optimizing their data retrieval process.

Case Study 1

Creditworthiness Assessment for Lender

Case Study 2

Creditworthiness Assessment (Optimization for Loan Approvals)

Client: Lender for a Popular Motorcycle Brand (California & Texas)

Challenge

Our client needed to optimize their loan approval process by accurately assessing the creditworthiness of loan applicants. This involved analyzing hundreds of parameters within each application to determine the associated risk and suggest adjustments for optimal return.

Solution

We developed an algorithm to analyze loan applications, calculate risk profiles, and recommend adjustments to optimize loan terms for both the lender and borrower.

Case Study 2

This involved:

Reverse engineering

We analyzed a provided calculation document to understand the existing assessment process.

Algorithm development

We built a Python-based algorithm using Linear Programming and Linear Optimization techniques from NumPy and SciPy libraries.

Automated testing

We implemented extensive automated testing to ensure the algorithm's accuracy and reliability.

Results

This project successfully delivered a solution that improved the client's loan approval process by optimizing creditworthiness assessments and loan term recommendations.

Case Study 3

Fraud Detection for Health Insurance

Client: Software Company from South Africa

Challenge

The client sought to develop a software system utilizing Machine Learning to detect fraudulent medical claims. This included identifying instances where individuals might fabricate claims for services not actually received, such as a false claim for a broken leg.

Case Study 3

The client needed a solution to:

Reduce financial losses

By accurately identifying and flagging fraudulent claims before processing.

Improve healthcare system efficiency

By streamlining claim processing and focusing resources on legitimate cases.

Solution

We conducted thorough research to design an ML-powered system capable of identifying fraudulent claims.

The system leveraged various algorithms, including Random Forest, Logistic Regression, and Deep Learning.

We utilized Python and its associated technical stack to develop and implement the solution prototype.

Jagan Solutions did an amazing job on our machine learning project, which involved taming free structured CSV files. Their work culminated in a fantastic, complex ensemble model that extracts dozens of data points from unstructured and semi-structured data without human intervention. Perhaps the most stand-out part of the work is the documentation. They put together a truly comprehensive, zero-to-complete-understanding guide to the entire process, from exploratory data analysis to running, deploying, and even updating the model. FANTASTIC!

I'm really glad to have worked with Jagan Solutions! I intend to return for new model construction when the time is right, and I know that you'll also be happy in your partnership with them.

1 / 5



William Flynt
Ivy Data



 **STREAMSTER**

Sergiy Yashchenko
Streamster

We hired Jagan Solutions for 3 different projects. And on each of them we were 100% satisfied not only with the development of the requested software, but also with the project management and team dynamics. Although project specifications changed drastically between the beginning of the development and the end at times, the team was always flexible, recommended the best way to the desired result and followed it through.

Guyi Shen
Seven

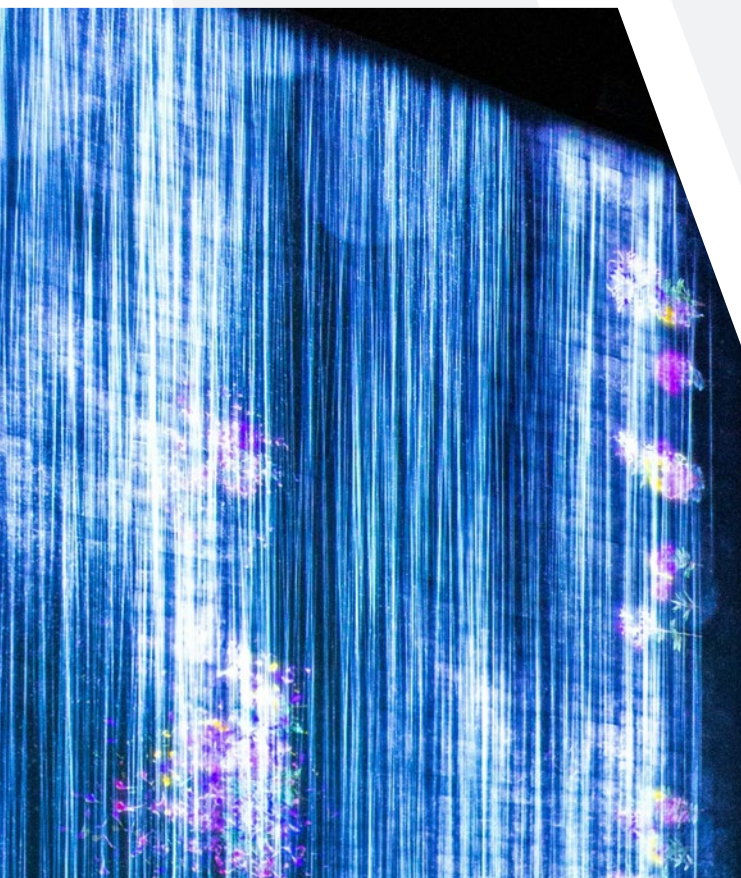
I am extremely impressed by the quality of the services I received from Jacek and Jagan Solutions. We started off with a goal and needed to refine and build towards a specific solution, and Jacek was on schedule, punctual, reasonable prices, professional throughout the project. The project was delivered on time and I will be able to integrate it into a bigger project.

I want to thank Jacek and Jagan for the wonderful job they did, and look forward to working with them again!





Prof. Wiesław Laskowski
University of Gdańsk



We hired Jagan Solutions to perform an optimization task, which we hoped would discover certain properties of quantum entangled states. We were interested in which states exhibited nonclassical behavior as defined by Bell inequalities (which are a concept in quantum informatics). Jagan clearly laid out the work plan and its stages and performed first class research and implementation work. They approached it as a performance-critical job and used C++ to achieve maximal computational efficiency. Their use of random unitary matrices provided a unique advantage, enabling the solution to be adapted and applied to a broader range of problems.

Jagan Solutions did a great job and showed prowess in the understanding of this scientific computing problem, the right choice of tools, execution, and testing. Go, Jagan!

We took the opportunity to collaborate with Jagan on two projects aimed at developing predictive models using Artificial Intelligence and Machine Learning for our company, Oferteo S.A. Our main objective was to quickly and efficiently explore how we could leverage AI/ML for making predictions. Jagan eagerly took on this challenge.

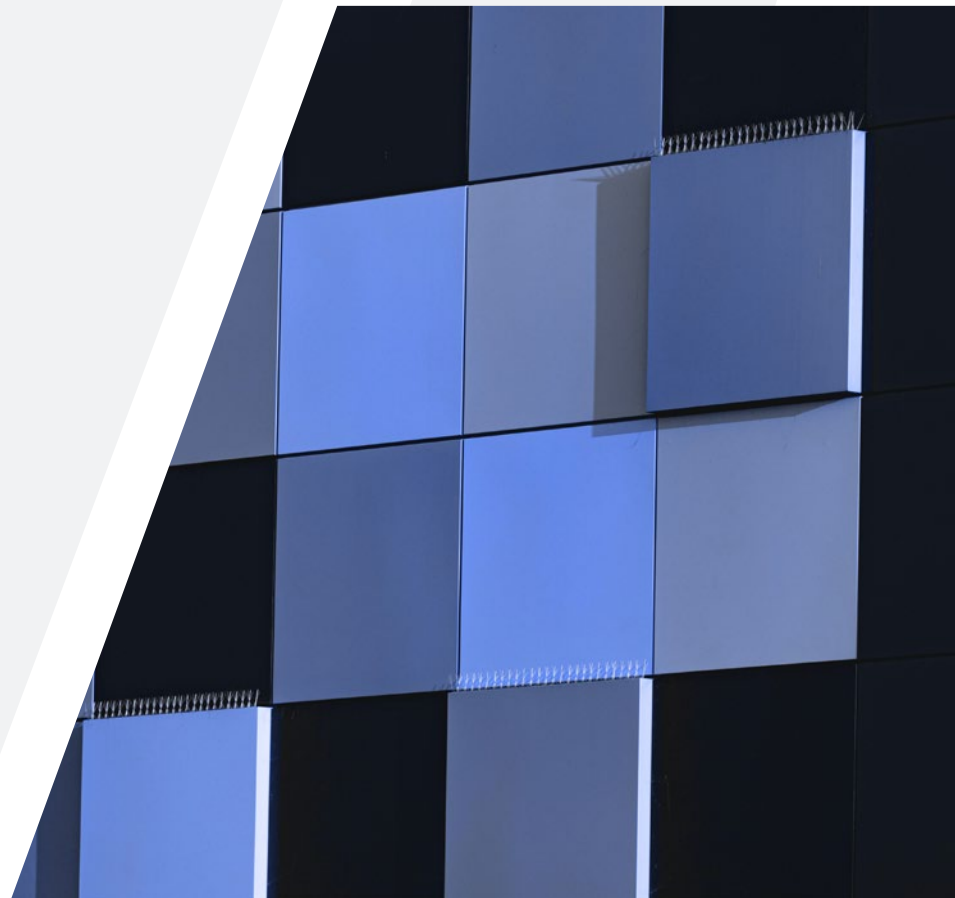
During the projects, the company developed several models for us. The Jagan team operated swiftly and effectively, generously sharing their knowledge and expertise at every stage of the projects, while approaching the tasks iteratively. Communication was seamless, and they were flexible and highly responsive to our needs.

5 / 5

oferteo

Przemysław Dziemieszkiewicz

Oferteo



JAGAN
SOLUTIONS

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Thank you
for your time

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