Machine learning consulting

Unlocking your data's potential.

Data has become one of the most powerful resources for companies to boost revenue and reduce costs. Machine learning systems help them turn their data into actionable insights, so they can make smarter decisions, predict future outcomes and scale operations.

In practice, innovation based on algorithms is complex and its implementation requires a strategic approach and technological expertise.
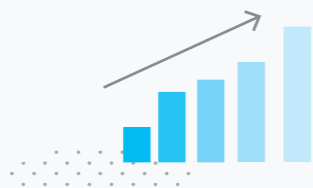
At Tryolabs, we understand the challenges of carrying out a successful machine learning project, and we work closely with you to help you in the full or partial execution of the machine learning process cycle.

We analyze your individual business case, build tailored machine learning models and put them into production, fully integrated into your infrastructure.

About Tryolabs

10+ years of experience in building end-to-end solutions that produce results

Experts in building custom machine learning systems

- Computer vision
- Natural language processing (NLP)
- Predictive analytics

Workshops and talks at leading conferences

MLconf pyimageconf

#ODSC PyCon

Proven track record

Allianz Global Investors The RealReal BAIN & COMPANY

GRUBHUB | LevelUp SES

HALLIBURTON

Part of the international machine learning community

Tryolabs blog

Valuable partnerships

Google Cloud ALGORITHMIA

elastic arm Developer

Testimonials

"Tryolabs stepped in during a time of rapid growth at LevelUp and helped us simplify digital ordering for restaurant brands. Each restaurant brand is different - their highest order volumes come in at different dayparts, and they each have custom menus and ordering processes - and Tryolabs built a system that was reliable at scale, despite the diverse use cases. We are proud to have counted their team of talented engineers as one of our partners."

Seth Priebatsch, Founder of LevelUp and Head of Enterprise Restaurants, Grubhub

"Tryolabs' team was not only able to rapidly adapt to our own set of processes and culture, but to quickly grasp telecommunications concepts previously unknown to them. They were responsible for the software layer of an important part of our solution, implementing agile methodologies, great technical skills, daily communication and even on-site visits to our offices."

Andre Christian, VP Product Design and Engineering, SES

"Tryolabs has been a key piece in optimizing and extending our category trees at a much higher pace than that we could achieve with our former tools and teams. Through the mastering and customization of state-of-the-art Machine Learning technics, we have been able to increase item "findability" and conversion rates. We are so glad to have them collaborating with us in the quest for the best e-commerce solution, I would absolutely recommend them."
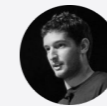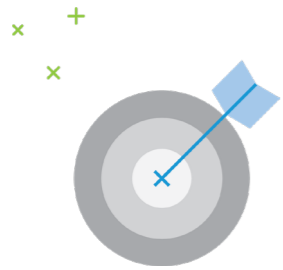
Diego Cabera, Senior Manager, MercadoLibre

Building a successful machine learning solution requires careful **analysis**, rapid **iteration**, and intelligent **optimization**.

How we work

1. Understand business goals

2. Analyze available data

3. Define a work-plan with your team

4. Perform model prototyping and implementation

5. Analyze results and perform other iterations

How we can help

Challenge I

Using machine learning to leverage the potential of data

Implementing a machine learning system that leverages the full potential of your data includes a clear understanding of your business objectives, a careful analysis of available data, as well as a rapid development of the machine learning model. It is natural for questions to arise:

- How do I measure the success of my machine learning initiative?
- Does the data I have serve the goal I want to achieve or do I need third-party data?
- How does machine learning fit into my current infrastructure?

How we can help

Strategic implementation of machine learning project

Tryolabs assists you in all stages of your machine learning project, including the following steps:

1. Understand your business goals.
2. Evaluate the condition of your datasets and examine how to best leverage them to obtain your objectives.
3. If your data needs to be labeled or classified, we support you by identifying the best opportunities for getting your data machine learning-ready.
4. Build, implement, and optimize your machine learning model until the desired results are achieved.

Example: We helped MercadoLibre, one of the largest online retailers in Latin America, build an automated category tree that increased productivity by a factor of five with respect to category creation and product classification.
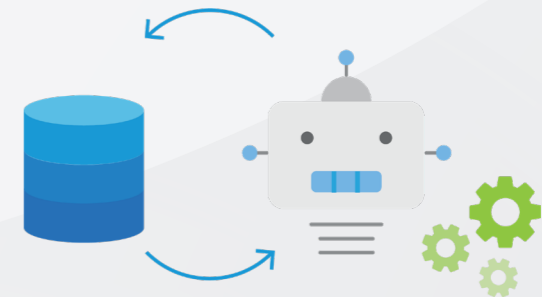
Challenge II
Acquiring machine learning talent

The faster you can improve your business metrics, the better. That's why you are looking for additional machine learning engineers who help you push forward with your project. Problem is, there is a high demand for machine learning expertise and hiring new engineers can prove difficult in the short-term. This challenge also comes up with long-term workforce planning, since the progress of a machine learning project can be hard to predict.

How we can help
Partnering up with your machine learning team

Filling the talent-gap with external resources can be a good alternative to hiring additional talent for your internal team. Tryolabs machine learning engineers step up when you need them and further your machine learning project utilizing the right set of skills, so that you don't have to compromise on the speed of the project or take risks with your internal recruitment process.

Example: A large online retailer engaged Tryolabs machine learning engineers to team up with its internal team in order to rapidly develop and implement a custom pricing solution that significantly saved costs for manual tasks.
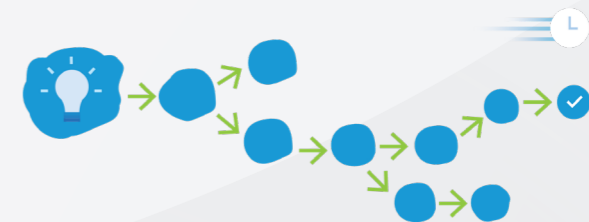
Challenge III
Experimenting with new ideas

You have recognized the potential of data to transform your business and you prioritize innovations with machine learning at the heart of your strategy. However, even the best idea is not beneficial if its implementation is not feasible. A machine learning endeavor implies experimenting with your data and pilot testing solutions with different models. This task is even more important when your business innovation includes cutting-edge solutions and problems that have never been solved before.

How we can help
Research and prototyping

Tryolabs' research team evaluates and tests your innovative ideas prior to implementation. We analyze your data samples and use them to test various machine learning models. Using state-of-the-art machine learning techniques, our data scientists rapidly build prototypes, testing and fine-tuning specific models in order to determine the one that is the most suitable for addressing the challenges you face.

Example: By partnering up with Tryolabs, the risk management company Better View was able to demonstrate that utilizing deep learning allowed for the greater scalability of their image analysis pipeline, reducing costs.

Challenge IV

Keeping up with research and trends

Making progress with your machine learning projects requires that engineers are laser-focused on their day-to-day tasks. Therefore, digging into the latest white papers in order to keep up with advancements and trends in the relevant fields of machine learning is an additional challenge for them. What is more, most machine learning courses offered don't provide engineers the opportunity to put theory to practical use and understand how it can be applied within the context of their specific projects.

How we can help

Trainings and workshops

Our team of data scientists and machine learning engineers helps you capitalize on your existing resources by bringing your team up-to-speed on the latest in machine learning advancements, all tailored to your knowhow and specific needs. In hands-on trainings, we review practices and techniques in the fields of machine learning, deep learning, computer vision, and NLP, and show you how you can take advantage of them. All trainings are offered either onsite or via online workshops.

Example: In a hands-on workshop at the PyImageConf in San Francisco, we were able to help a group of 50 engineers become familiar with how to apply object detection using deep learning.
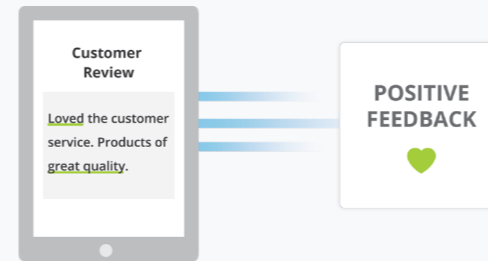
Expertise
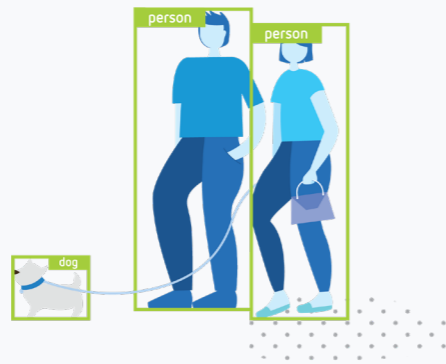
Computer vision

We use deep learning and other state-of-the-art techniques to gain valuable insights from images and videos.
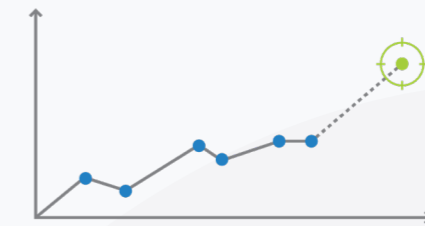
- Object detection and tracking
- Search for visually similar images
- Person pose and gaze estimation

Natural language processing

Based on text inputs we use machine learning models to understand content and unstructured information.

- Sentiment analysis
- Entity recognition
- Chatbots

Forecasting models

We leverage time series analysis and anomaly detection to accurately predict future events.

- Pricing automation and optimization
- Customer profiling and segmentation
- Recommender systems

Why Tryolabs

Experienced with machine learning

Throughout 10 years of practical machine learning experience, we've developed an immense understanding of the wide variety of use cases across different industries and what makes or breaks a potentially successful machine learning project.

Custom solution providers

Every business has its own strengths and pain points. That's why we analyze each individual case and create highly-tailored machine learning solutions and infrastructures that enhance your business.

End-to-end

Scalable machine learning solutions require appropriate infrastructure and elegant visualization. We use Python-powered backends to craft unique, scalable applications, integrated into your existing systems.

Results-oriented

The ultimate goal of every machine learning project is to increase revenue and/or reduce costs. We help you set realistic goals and leverage our enthusiasm and expertise to help your team reach them.

State-of-the-art awareness

Advances in machine learning are being made constantly. Our research division eats, sleeps, and breathes the latest in academic and open source developments, and employs them to tackle real-world industry challenges.

Working with Tryolabs

Thinking of kicking off your own machine learning project? **Let's talk;** we'd love to hear about it!

hello@tryolabs.com

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