

# Artificial Intelligence and Data Science Services



#### Preamble

Your business generates and stores a tremendous amount of data. Oftentimes, the information is fragmented and sits stagnant. A wealth of knowledge can be gleaned but the data extraction is difficult and cost prohibited. What if there is an efficient and affordable way for you to create a consistent stream of data? Insightful data that can boost revenue, reduce cost, mitigate risk and drive smarter decision. At JKA, we provide solutions to such data issues.

# JKA's Practice

JKA's Artificial Intelligence (AI) and Data Science Practice elevate data processing to the next stage. We perform the data gathering and cleansing, enrich it with third party data and present a comprehensive perspective for analysis. Where applicable, the latest AI technology is utilized to generate rapid results. Our services produce actionable data insights that significantly contribute to our clients' competitive advantage.

JKA offers clients an experienced team of multilingual Data Scientists and AI specialists with advanced degrees in the areas of mathematics and computer science from global universities. This team is supported by our Data Analysts who can collect, enrich and tag training data for machine learning projects. Many of these resources are staffed in our low-cost offshore location, allowing clients to tap into this talent pool at significant labor savings.

JKA provides client services through various technological applications depending on the organizational needs.

### **Specialty Areas**

Natural Language Processing. JKA specialists utilize machine and deep learning methods in natural language processing. We process millions of documents and webpages daily to moderate content and identify content violations, manage brand exposure and mitigate IP risks for our clients. Our neural network models are applied against contents in multiple languages.

Predictive Analytics. JKA regularly applies machine learning in predictive analytics. Our tools benefited organizations in a multitude of ways. They're utilized to improve forecast accuracy for demand planning, predict timely maintenance to reduce expensive equipment downtime, or even manage customer attrition by identifying at-risk clienteles.

Computer Vision. JKA's work in computer vision includes resolving clients' image processing issues in the areas of object detection and logo or brand monitoring. Our team develops neural network models to identify products for eCommerce, classifies objects for risk mitigation and processes unstructured text where optical character recognition failed.



# Partnering with JKA

## Case Examples

#### Natural Language Processing

JKA developed a progressive model for a Top 5 online marketplace. The model utilized natural language processing to identify illegal products for sale on the platform. The model's performance result surpassed the markeplace's technology. In comparison to current technology, JKA's natural language model identified 20% more violations and its false positive rate was 90% lower. This success contributed to a 90% reduction in the client's labor costs.



#### Predictive Analytics

JKA was charged with developing a Predictive Failure model to identify equipment failure within a five-day window. Once implemented, the model enabled the organization to schedule maintenance prior to a machine failure. The JKA team successfully met the client's objective of minimizing machine downtime and expensive emergency repairs. Using sensor data across different models and locations, the model was able to predict machine failures with an 80%+ accuracy level.

JKA's AI and Data Science resources have the qualifications to keep pace with the leading edge of technology.

Our services deliver innovative solutions to our clients' business challenges. Whether you're just starting out and are interested in building an AI or Data Science department or you already have an established operation but have resource limitations, JKA can help. We offer several partnership options.

#### 1. A Dedicated Team.

JKA can provide a team of experts, dedicated to your organization, working on your schedule, trained to understand your business and company culture. Located offshore, our experienced resources can augment your staff at a significant cost savings, e.g. offshore labor rates can be up to 70% less than U.S. labor rates.

# 2. Flexible Resource Support.

JKA provides clients immediate access to scarce AI and Data Science resources. We can assist organizations accelerate their projects or mitigate project risks and challenges with flexible and affordable resources on a project-by-project basis.

# 3. In-House Program.

JKA's resources possess practical experiences. They have the knowledge to facilitate the establishment of your own AI and Data Science functions. We can assist with:

- Articulating a vision
- Developing training requirements
- Identifying business-driven use cases
- Delivering efficacious projects
- Generating momentum for AI and Data Science initiatives

For additional information about JKA or its services, visit www.jkadvisory.us or contact info@jkadvisory.us