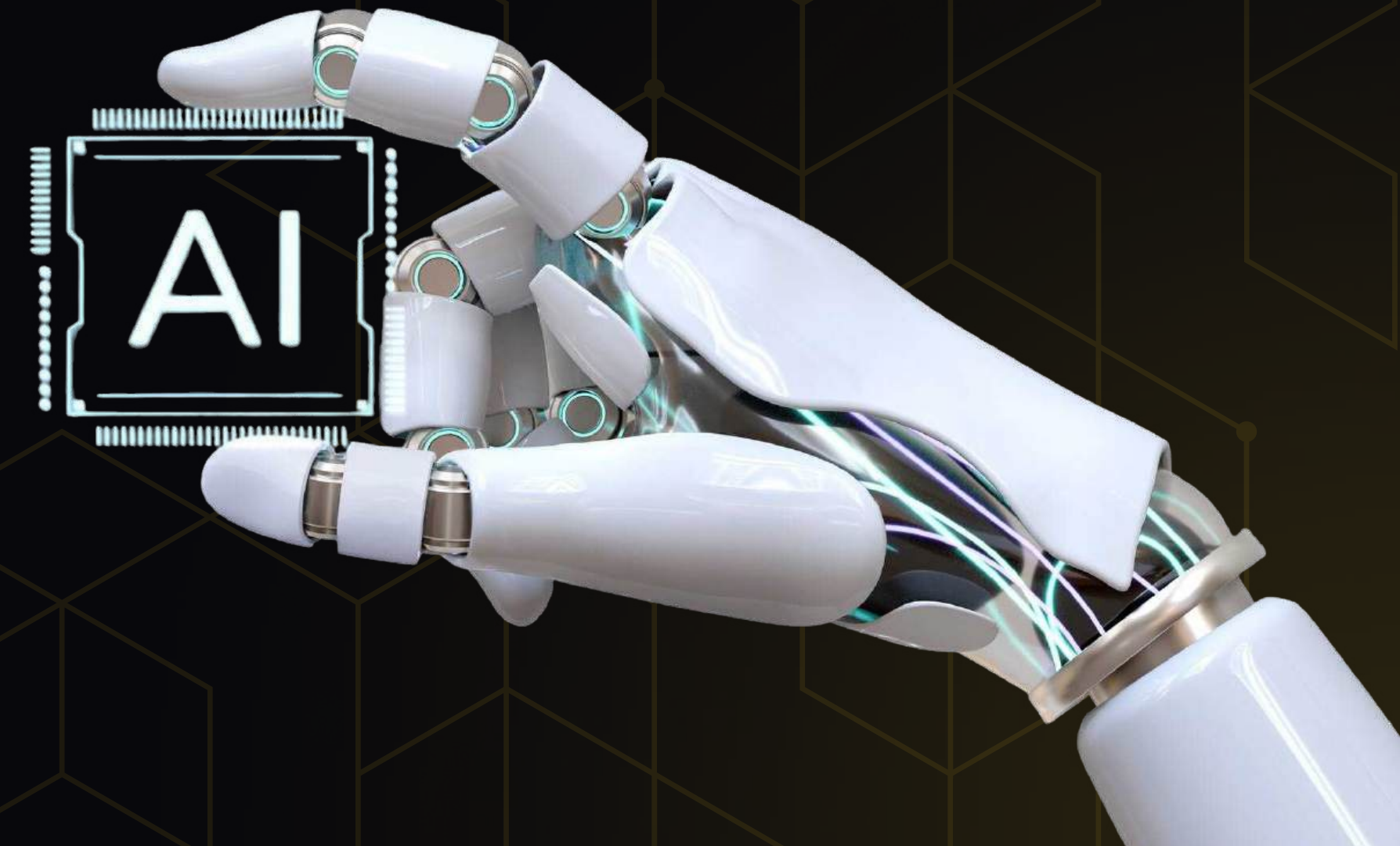


# Yudiz Solutions Limited



# Upgrade your AI/ML Roadmap

**Benefit from our high-quality AI/ML solutions across diverse projects for a partner like you.**

- Our expertise ensures your models are highly accurate, scalable, and tailored to drive intelligent decision-making, enhancing performance and efficiency, no matter the complexity or industry.
- Our expertise spans a range of AI technologies, including LLM development, Generative AI services, AI agents, Avatars, computer vision and others.

**Help infuse AI into your products and services.**

**15+**

Years of Innovation

**80+**

Models Deployed

**10+**

Industries  
Transformed

**24/7**

Availability

**99%**

Retention

# 15+ Years of Award Winning Technical Excellence Trusted By

We've had the good fortune to work with many innovative companies that share our passion for leveraging AI and machine learning to enable exciting and powerful product capabilities





# Testimonials



**Bob A.**

**Head of Engineering,  
Business Consulting Co., Canada**

Whether it was AI integration, or code refactoring, they stuck to the timelines we set. If any unexpected issues popped up, they were quick to let me know and worked hard to keep things on track. Their reliability was a huge relief, especially when we were pushing to get new features out to users quickly.

For them, it's not just about stacking up a long list of clients—they're actually and truly focused on making sure each project they take on is a success. You can tell they're invested in our goals and want to see us succeed as much as we do.



**Jason M.**

**CTO, AI Start-Up, USA**

ML integrations, combined with optimized agentic flows, accelerated our development timeline. We were able to launch key features two months ahead of schedule, giving us a competitive edge in our market.



**Gregory F.**

**Product Manager,  
Fleet management company, Finland**

This was my team's first time working with AI/ML and they were able to eliminate any confusion we had on the process/results which can be very complex. The team always escalated potential blockers early on in the process to give my team time to action. If we were delayed in actioning these blockers they continued to work and provided creative short term solutions while our plan was implemented.



# Yudiz Offers Services for Every Phase of the AI Lifecycle



## Path Finder

Quickly and cost effectively find your path forward including a detailed plan on your immediate next steps.



## Annotation Gathering

Experts supervised, and always active learning driven, our human annotation services minimize the amount of labelled examples needed, and maximize the efficacy impact to your models.



## Solution Assessment

A high value, complete and robust assessment of your problem, how AI can help, and exactly what needs to be done over the next period of weeks.



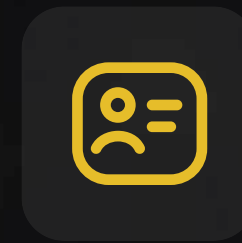
## AI Model Development

Rapid, iterative, model development with transparent efficacy assessment throughout and a focus on de-risking your business problem well before model refinement.



## Dataset Analysis

Through and actionable analysis of your data so you can better understand what can be done using AI on your data.



## Your Own Chief Data Scientist

Our rock solid advisory service can help guide you on all aspects of AI including project identification, prototype construction, and execution.

# AI Expertise



## AI Recommendation Systems

“Netflix thinks it knows you? We build systems that actually get you. Personalized experiences that convert—no stalker vibes, just smart data.”



## Computer Vision

“From images to insights—we teach machines to see, so you don’t have to squint at CCTV footage anymore. Automate it all, pixel by pixel.”



## Data Science

“Your data holds secrets—we decode them. Strategic insights, not just graphs that look good in board meetings.”



## Chatbots and Conversational AI

“Our bots don’t just reply—they understand. Human-ish conversations that scale support, not your blood pressure.”



## Machine Learning (ML)

“We don’t guess—we let the models do it. Predict, adapt, and evolve your systems with scalable ML pipelines built for real-world chaos.”



## Data Capture / OCR

“We turn your dusty documents into digital gold. OCR so sharp, even your doctor’s handwriting won’t survive.”

# AI Expertise (Contd.)



## Predictive Analysis

“Crystal balls are old-school. We use data to predict trends before they happen—your business’s sixth sense.”



## Natural Language Processing (NLP)

“We make machines fluent in human. From messy inputs to meaningful results—because language is more than just 1s and 0s.”



## Voice and Speech Recognition

“Alexa who? We craft voice systems that listen and make sense. Speak your needs—our tech’s already typing the solution.”



# Generative AI Expertise



## AI Code Generation

Why code from scratch when AI writes 80% of it (and doesn't ask for coffee breaks)? We automate development so your devs can focus on the fun bugs.



## AI Image Generation

"From 'idea' to Insta-worthy in seconds. We create visuals that would make Picasso question his career path."



## AI Speech Generation

"Robots with voices smoother than your sales guy. Lifelike, brand-aligned, and eerily good at public speaking."



## AI Text Generation

"Blogs, bios, banners—our AI writes faster than deadlines approach. Thoughtful, tone-perfect, and mostly typo-free."



## AI Video Generation

"Hollywood-level content without the Hollywood budget. Our AI generates videos that pitch, teach, or sell—while you sip coffee."

# AI Agents



## Conversational AI Agents

"Smarter than your average chatbot—our agents understand, engage, and actually help. No more robotic 'How can I assist you today?' loops."



## Predictive AI Agents

"They don't just react—they pre-act. Predict trends, user behavior, or even your next business move—like a data-powered fortune teller."



## Personalized Recommendation Agents

"Hello, algorithmic soulmates. Our agents match users with what they actually want—before they even know it themselves."



## Crypto AI Agents

"Trading bots with brains. Analyze, predict, and act on crypto chaos with agents that don't blink during market crashes."



## Task Automation Agents

"Give them a task, they'll never ghost you. From routine to complex workflows—our agents click, move, and finish like clockwork."



## Multi-Agent Systems

"One agent is good, a squad is better. We build coordinated systems where agents talk, cooperate, and get sh\*t done—no drama."



## Monitoring & Alerting Agents

"Eyes on everything, 24/7. These agents catch issues before your team even logs in—because prevention > panic."

# AI Tech Stack

## DL Frameworks

PyTorch, LangChain, Caffe2, Chainer, Nvidia, Theano, Keras, Mxnet

## Modules/Toolkits

Core ML, Kurento, Microsoft Cognitive Toolkit

## GenAI Models

Open AI, LLama, Gemini, Stable Diffusion, Claude, Embed

## Algo

Clustering, Supervised/Unsupervised, Fewshot, Metric





# AI Tech Stack (Contd.)

## Image Classification Models

EfficientNet, VGG Transformation, Inception, ResNet-50

## Libraries

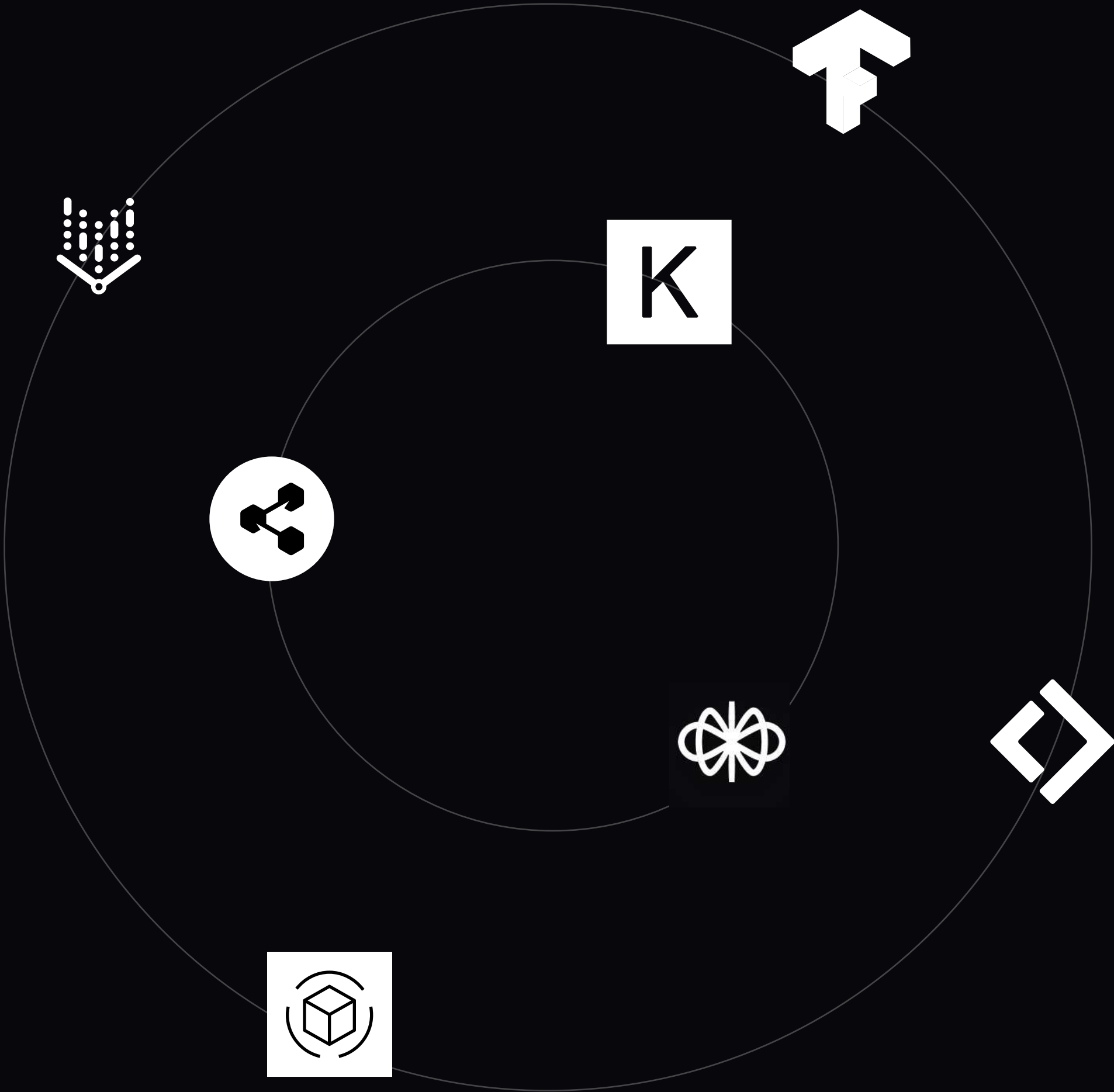
Tensor2Tensor, Neuroph, Sonnet, TensorFlow, OpenNN, Tf-slim

## Cloud Services and Engines

Amazon Rekognition

## AI Agent Platforms

Botpress, Vertex AI, Chatbase (best), VoiceFlow, Microsoft Copilot Studio, Lindy AI



# Capabilities



## AI Strategy Development

We help businesses craft actionable AI strategies that align with their long-term goals, ensuring they unlock the full potential of generative AI.



## Agentic Workflows

We design autonomous AI agents that dynamically interact with users or systems, automating complex workflows and driving innovative user experiences.



## LLM Fine Tuning & Training

Our expertise in fine-tuning and training large language models allows us to deliver tailored AI models that provide accurate, contextually relevant outputs for specific use cases.



## RAG Application Creation

We build advanced applications that combine Retrieval-Augmented Generation (RAG) techniques, empowering businesses with fast, high-quality AI-driven insights.



## Conversational AI

We create intelligent AI chatbots that integrate with your business's source of knowledge, providing personalized, data-driven interactions that elevate customer support and engagement.



## Data Engineering

We create data pipelines that ingest, integrate, and clean data from multiple sources, ensuring your AI models have reliable, structured data to function effectively.

# Client Stories



# Computer Vision And Deep Learning

Our client, operating in the construction and infrastructure industry, required an automated solution to detect corrosion in structural components such as buildings, bridges, and dams. Traditional inspection methods were time-consuming, labor-intensive, and prone to human error. The client wanted AI-powered software capable of identifying corrosion accurately and efficiently using image analysis.

## What sucked before?

**Manual Inspections:** Engineers had to conduct on-site inspections, which were slow and inefficient.

**Human Error:** Corrosion signs were often overlooked, leading to delayed maintenance.

**High Costs:** Regular inspections required significant labor and time investments.

**Inconsistent Results:** Variability in detection accuracy across different inspectors.

# Computer Vision And Deep Learning (Contd.)

## How have we balanced the load on this?

**Cloud-Based Processing:** Offloaded image processing tasks to Microsoft Azure, ensuring high availability.

**Efficient Model Optimization:** Utilized lightweight deep learning models for faster inference without compromising accuracy.

**Load Balancing Algorithms:** Implemented request distribution strategies to prevent server overload and optimize response times.

**Asynchronous Processing:** Enabled parallel processing to handle multiple image analyses simultaneously.

Input Image



Results



Corrosion Area (In Yellow) : 1.69%  
Repair Area (In Green Box) : 3.81%

# Computer Vision And Deep Learning (Contd.)

Input Image



Results



Corrosion Area (In Yellow) : 2.75%  
Repair Area (In Green Box) : 8.8%

Input Image



Results



Corrosion Area (In Yellow) : 0.19%  
Repair Area (In Green Box) : 0.35%



# Solution Overview

To address these challenges, we developed an AI-Powered Corrosion Detection Software leveraging state-of-the-art deep learning and computer vision techniques. Our solution enables real-time corrosion detection by analyzing images of structural components.

## Result

- **Increased Efficiency:** Eliminates manual inspection bottlenecks and speeds up the detection process.
- **Enhanced Safety:** Reduces risks associated with structural failures by identifying early signs of corrosion.
- **Cost Savings:** Minimizes maintenance costs by enabling proactive repairs.
- **Scalability:** Designed to handle large-scale infrastructure projects.

By implementing this AI-powered solution, our client now benefits from a faster, more accurate, and cost-effective approach to corrosion detection, ensuring improved infrastructure maintenance and safety.

# AI Chatbot

A leading travel service provider, sought an AI-driven chatbot that could streamline the travel booking process. They needed an intelligent assistant capable of handling real-time flight and hotel bookings while providing personalized recommendations to enhance user experience.

## What sucked before?

**Cumbersome Booking Process:** Users had to visit multiple websites to compare flights and hotels, making travel planning time-consuming.

**Lack of Personalization:** Standard booking platforms failed to provide personalized recommendations based on user preferences.

**Delayed Customer Support:** Traditional support systems had long response times, frustrating users seeking quick answers.

**Limited Interaction:** Existing solutions lacked conversational AI capabilities, making user interaction rigid and unintuitive.

# AI Chatbot (Contd.)

## How have we balanced the load on this?

**Efficient Query Processing:** Optimized Redis caching for rapid retrieval of frequently accessed travel data.

**Asynchronous API Calls:** Implemented concurrent request handling to prevent delays in fetching live flight and hotel data.

**Load Balancing Mechanisms:** Distributed user requests effectively across multiple instances to ensure smooth interactions.

**Scalable Cloud Infrastructure:** Designed the chatbot for high availability, accommodating increased traffic seamlessly.

# Solution Overview

To address these challenges, we developed an **AI-Powered Travel Booking ChatBot** that leverages natural language processing, real-time data retrieval, and intelligent automation. Our solution transforms travel planning into an effortless and engaging experience.

## Result

- **Enhanced User Experience:** Eliminates the hassle of multiple searches and simplifies travel bookings.
- **Time Efficiency:** Significantly reduces the time required to finalize travel plans.
- **24/7 Availability:** Provides instant support and booking assistance around the clock.
- **Scalable & Future-Ready:** Designed to handle an increasing number of users effortlessly.

By implementing this AI-powered chatbot, our client now offers a cutting-edge travel booking solution that enhances user engagement, streamlines planning, and ensures seamless customer support.



# Machine Learning (ML)

Our client in the health and fitness domain sought a smart solution that could monitor users' physical exercises in real time, specifically detecting squats and other fitness poses accurately. They wanted the system to analyze movements, provide instant feedback, and reward users with a point-based scoring system based on the correctness of the poses.

## What sucked before?

**Lack of Real-Time Feedback:** Fitness apps only tracked repetitions, not the accuracy or form of movements.

**No Visual Pose Validation:** Users couldn't verify if they performed exercises correctly, increasing the risk of injury.

**Low Engagement:** Without gamification or scoring, users lacked motivation to improve posture or consistency.

**Limited Accessibility:** Traditional fitness tracking relied on wearables or human trainers.

# Machine Learning (ML) (Contd.)

## Challenges Faced

**Pose Accuracy** – Ensuring reliable detection across varying body types, angles, and lighting conditions.

**Real-Time Performance** – Delivering low-latency feedback to users performing dynamic movements.

**Scoring Logic** – Creating a fair, consistent point system to evaluate the correctness of poses.

**Generalization** – Enabling the system to recognize a variety of poses beyond just squats.

## Solution Overview

To meet these goals, we developed an AI-Based Pose Estimation System capable of detecting squats and other fitness poses with high precision. Built on advanced machine learning algorithms and MediaPipe, this real-time system assesses user movements, validates form, and provides immediate feedback along with a point-based scoring mechanism.

## How have we balanced the load on this?

**Lightweight Model Deployment:** Used MediaPipe's efficient models to ensure fast processing on edge devices.

**Frame Optimization:** Processed selected frames instead of all to maintain real-time performance.

**Resource Management:** Leveraged threading and asynchronous handling to manage video input and inference simultaneously.

**Modular Design:** Built a modular architecture to easily extend support for more exercises in future updates.

## Result:

**Enhanced Fitness Experience:** Offers users a virtual trainer experience with instant guidance.

**Improved Accuracy:** Promotes better posture and exercise form, reducing injury risk.

**Gamified Motivation:** Engages users through point-scoring, encouraging consistency.

**Accessible Technology:** Enables pose tracking using standard cameras without additional hardware.

With this AI-powered system, our client now offers an engaging and intelligent fitness tool that motivates users, ensures safety, and modernizes home workouts through cutting-edge pose estimation technology.



# AI Agents in Web3

Cloning and tweaking AI agents to handle your on-chain tasks, making them faster, smarter, and ready to grow with your biz. Think of it as giving your operations a turbo boost—without the complexity. Just straightforward solutions that work!



## Virtuals Protocols

A platform for creating decentralized AI agents that can interact with blockchain networks. Imagine building a team of digital assistants who can manage your crypto transactions, like a group of accountants who never sleep. We clone and customize these AI agents to handle tasks like trading, auditing, and securing your crypto assets. Think of it as teaching these assistants to speak the language of blockchain, so they can work seamlessly across different networks.



## Swarms

A platform for building AI agents that work together like a hive mind. Picture a colony of ants, each with a specific job, but all working toward a common goal. We create AI agents that collaborate in swarms, whether it's for data analysis, trading, or managing decentralized apps. We customize these agents to ensure they communicate effectively, like ants leaving pheromone trails, to solve complex problems faster.



## Holozone

A platform for developing AI agents that operate in virtual environments. Think of Holozone as a virtual playground where AI agents can train and interact. We build agents that can navigate these environments, like gamers mastering a new level. Whether it's simulating market conditions or testing strategies, we customize these agents to perform tasks in virtual worlds before they tackle real-world challenges.



## ElizaoOS

A platform for creating AI agents that mimic human-like decision-making. Imagine an AI that thinks like a seasoned trader, analyzing trends and making split-second decisions. We clone and tweak these agents to act like experts in their field, whether it's trading, customer service, or data analysis. It's like giving them a crash course in human intuition, so they can make smarter choices.



## VVAIFU

A platform for building AI agents that specialize in personalized interactions. Think of VVaifu as a digital companion that knows you better than your best friend. We customize these agents to understand your preferences, whether it's managing your crypto portfolio or suggesting investments. It's like having a personal assistant who learns your habits and adapts to your needs over time.



## VaderAI

A platform for creating AI agents that excel in predictive analytics. Imagine a weather forecaster who can predict market trends instead of storms. We build AI agents that analyze data patterns to forecast outcomes, like predicting the next big crypto trend. We customize them to be your crystal ball, helping you stay ahead of the curve.

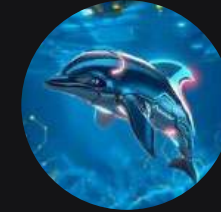


# AI Agents in Web3 (Contd.)



## StonefishAI

A platform for developing AI agents that focus on risk management. Think of Stonefish AI as a safety net for your crypto investments. We create agents that monitor risks, like a lifeguard watching for dangerous waves. Whether it's detecting fraud or managing portfolio risks, we customize these agents to keep your assets safe and secure.



## Dolphin Agent

A platform for building AI agents that specialize in high-speed trading. Imagine a dolphin gliding effortlessly through the ocean, always ahead of the pack. We develop AI agents that trade at lightning speed, executing transactions in milliseconds. We customize them to navigate the fast-paced crypto market, ensuring you never miss an opportunity.



## Polytrader

A platform for creating AI agents that trade across multiple markets. Think of Polytrader as a multilingual tour guide who knows every corner of the crypto world. We build agents that can trade on various platforms simultaneously, like a chef managing multiple dishes at once. We customize them to adapt to different market conditions, ensuring consistent performance across the board.

# Our Skilled Team

These represent common roles staffed to partners based on their unique needs.

**ML Lead and Engineer**

**Data Scientist**

**AI Lead and Engineer**

**AI and Python Project Managers**

**Python Lead and Engineer**

Our team includes experts like speakers, and organizers featured in major tech outlets. They are analytical thinkers, predictive modelers, and collaborative innovators with a passion for turning data into actionable insights. Skilled problem solvers specialize in designing and managing the infrastructure needed for running models.

# Get started in as Little as two weeks

We provide best proposal with every engagement

## Staff Augmentation

Add engineers to your team seamlessly for less than the cost of employees. We staff individuals as well as teams of 50+ people, plus project managers, DevOps, QA, and designers.

## Product studio

Build a high-quality, user-centric product or feature from scratch, fast and on budget. We staff embedded product teams with PMs, UX/UI designers, frontend, backend, data engineers, and QA.

## Project Sprints

Audit data, code or UX/UI. Train and optimize an AI/ML model. Scope a migration or upgrade. Build a proof of concept or design a prototype. We offer many short-term, shovel-ready projects.

# Balance Your Load With Us!

Thinking of Turning your AI and ML vision into a tangible, impactful product? Reach out to us today, and let's start building your custom solution.

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