

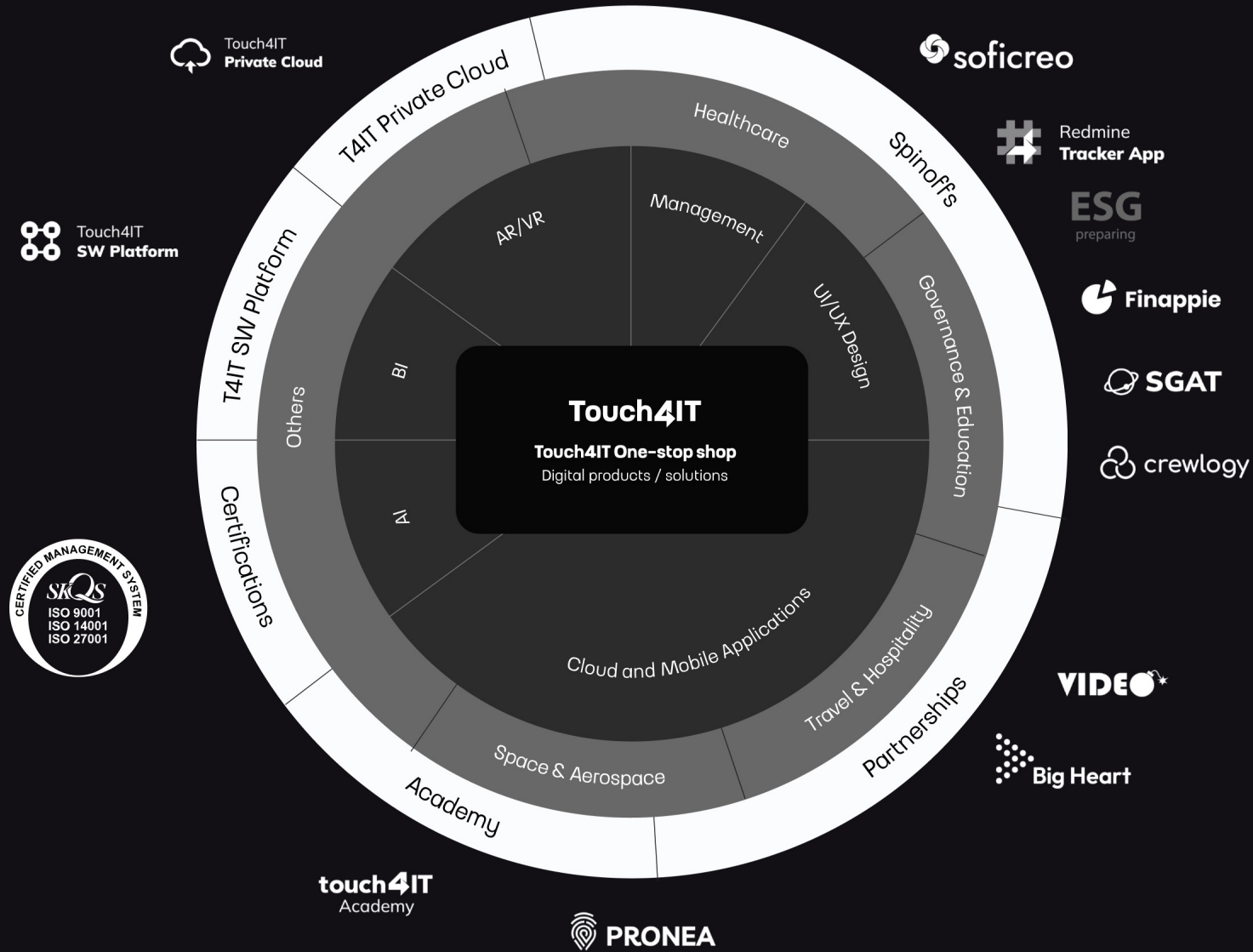
Artificial Intelligence

Portfolio and Expertise

We Are a One-Stop Shop

**Specializing in the Design and
Development of Digital Products**

We elevate our client businesses with our expertise in advanced technologies, including AR/VR, AI, BI, and custom software solutions.



Touch4IT

9+

Years of Experience

300+

Finished Projects

24

Countries Where We Operate

Artificial Intelligence



**Make Better & Faster
Business Decisions**



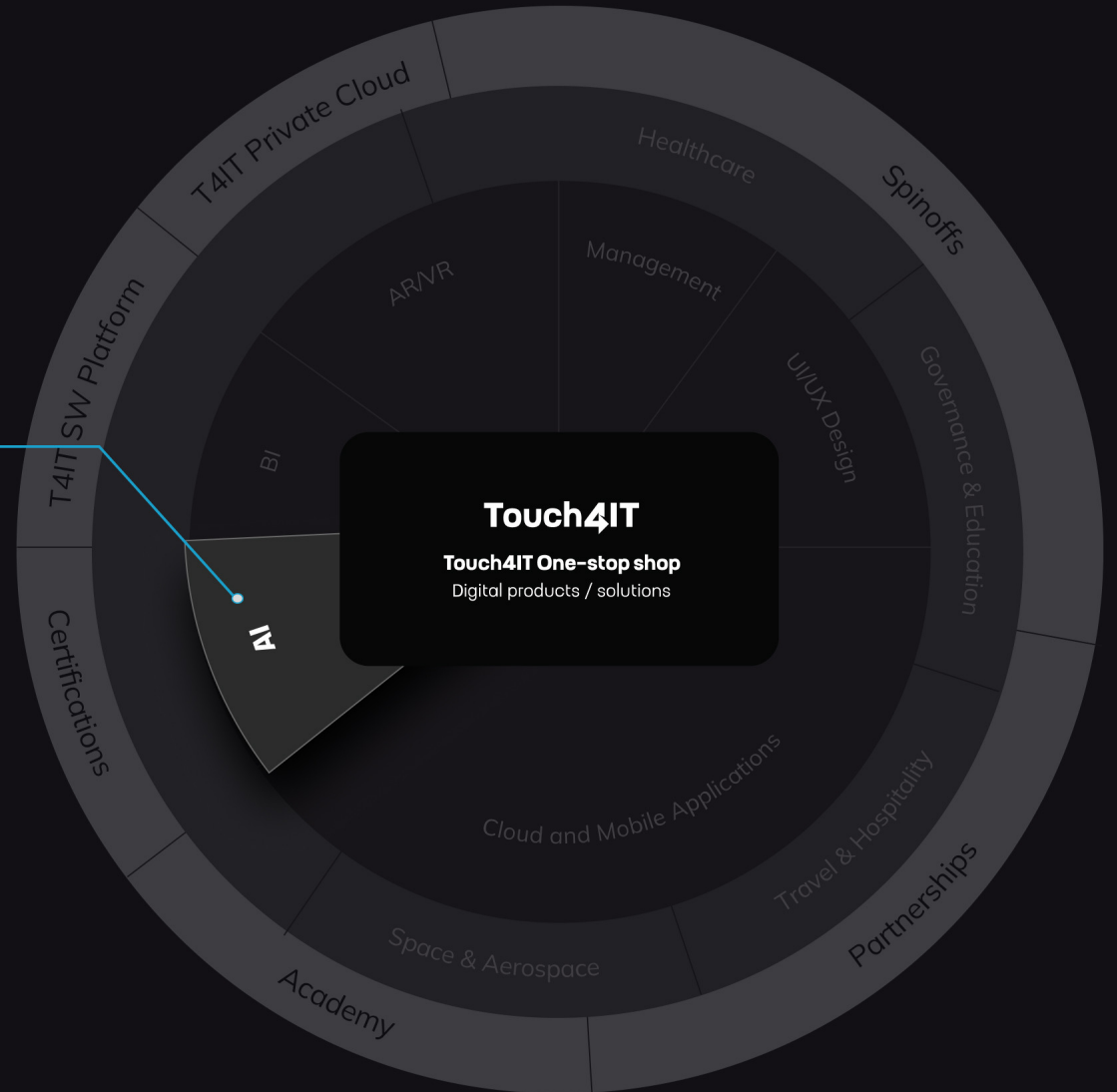
**Increase Productivity While
Reducing Time & Cost**



**Boost Customer
Satisfaction & Loyalty**



**Build Proactive Business
Strategies**



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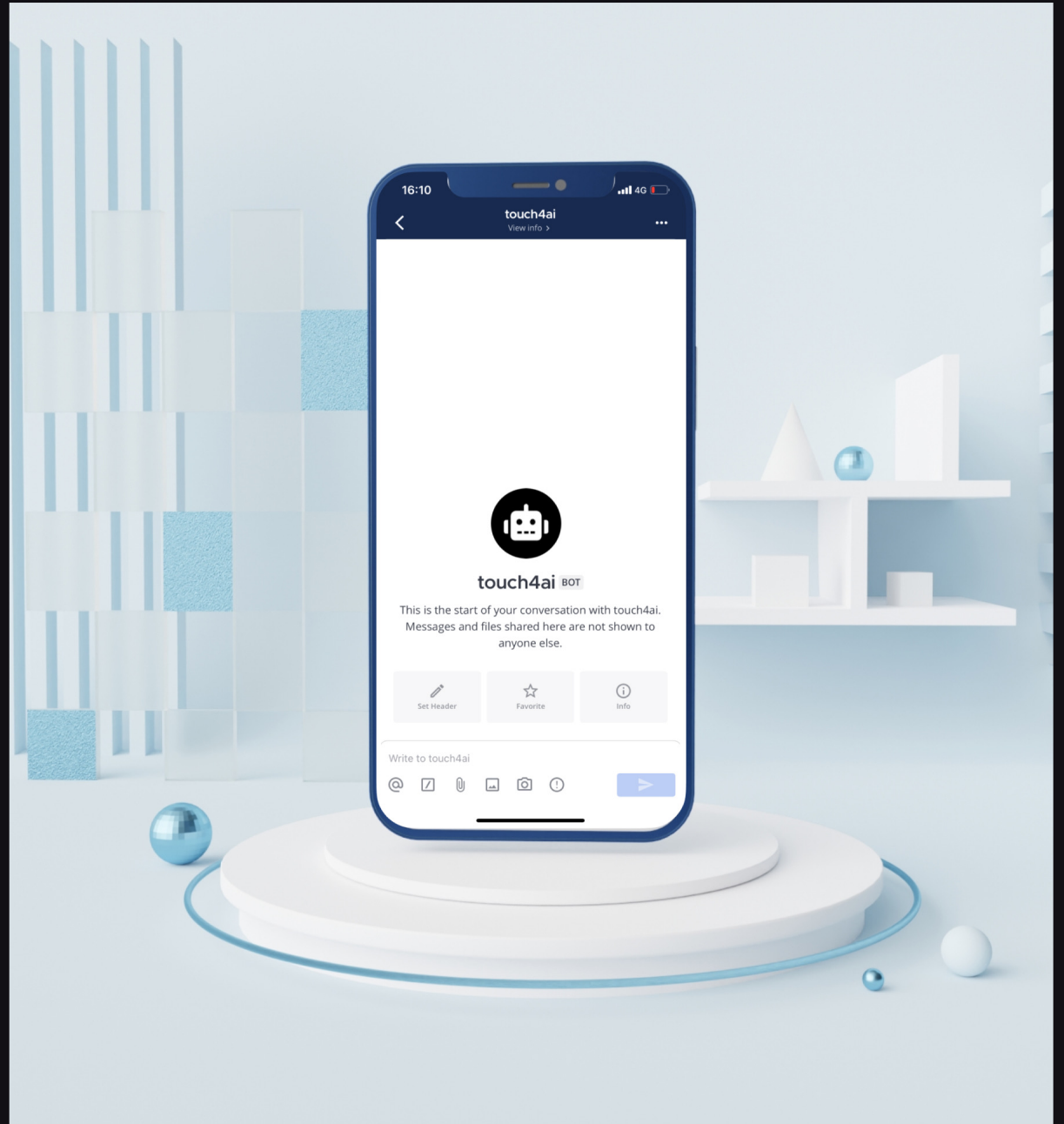
Our AI Expertise

Our Expertise

Artificial Intelligence

Artificial Intelligence (AI) solutions are crafted to tackle your unique business challenges and extract valuable insights from complex datasets. Our advanced AI solutions empower your organization to automate processes, enhance decision-making, and drive innovation, addressing critical issues such as operational inefficiencies, high costs, and the inability to quickly adapt to market changes.

- **Problem Identifying & Feasibility**
- **Data Preparation & Development**
- **Deployment & Integration**
- **Monitoring, Evaluation & Scaling**



AI Department Capabilities

Data Science

We uncover valuable insights from your data through statistical analysis, data mining, and exploratory data analysis.

- **Predictive Maintenance**
- **Fraud detection**
- **Personalized Marketing**
- **Risk Assessment**
- **Recommendation Systems**

AI & ML

We leverage state-of-the-art algorithms to build robust models for various applications, including image recognition, natural language processing, and recommendation systems.

- **Natural Language Processing**
- **Assistant Systems**
- **Computer Vision**
- **Object detection and tracking**
- **Pose estimation**
- **Image segmentation**
- **Image generation**
- **Classification & Clustering**
- **Deep Learning**
- **Transformers**

MLOps

We efficiently transition from model development to deployment, ensuring seamless integration into your existing systems.

- **Automated Model Deployment**
- **Model Monitoring and Management**
- **Model Versioning and Collaboration**
- **Scalable Infrastructure Management**
- **Automated Model Training and Updates**

Our AI Expertise



Chatbots and Conversational AI

We deploy AI chatbots for efficient communication, reducing misinterpretation and streamlining processes.



Natural Language Processing (NLP)

Our NLP solutions optimize text processing, enhancing business workflows and analysis.



Recommendation Systems

Our systems personalize offerings based on customer preferences, fostering loyalty and retention.



Predictive and User Behavior Analytics

We predict trends and customer behavior for targeted marketing and optimized services.

Touch4IT

Our AI Expertise



Neural Networks and Deep Learning

We extract valuable insights from data to inform decision-making, strategy, and product development.



Computer Vision

Our systems analyze visual data for object and facial recognition, benefiting industries like autonomous vehicles and robotics.



Voice and Speech Recognition

We create solutions for streamlined communication, from automated calls to speech-to-text transcription.



Robotic Process Automation

Our software robots automate tasks, saving time and costs across industries.

Our Tech Expertise

- AI/Machine Learning
- Data Mining
- Model Evaluation Metrics
- LLMs
- Neural Networks (ANN, CNN, RNN)
- Data Pre-processing
- Pytorch Basics
- Fuzzy Systems
- Computer Vision
- Data Visualization
- Reinforcement Learning
- Prompt Engineering
- Deep Learning
- Supervised Learning
- Evolutionary Algorithms
- Embedding, NLP and Tokenization

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Meet Our AI Team 



Peter Takáč

Artificial Intelligence R&D Team Lead

- Accomplished R&D Team Lead at Touch4IT, where he brings cutting-edge experience in Data Science, AI, ML and BI.
- His background includes roles in developing sophisticated solutions for real-time data processing and visualization.
- Holds a Ph.D. degree, centered on emotion recognition in social robotics, has deep understanding of computer vision and neural networks.
- As a team lead, Peter stands out for his ability to navigate complex technical challenges while ensuring that client's strategic objectives are met with precision and efficiency.



Lukáš Láni

Business Intelligence Project Manager

- Technically oriented and open-minded with strong analytical skills. With over 7 years of experience, he has honed his skills as a seasoned Project Manager and adept Information Security Specialist. His background includes roles in developing sophisticated solutions for real-time data processing and visualization.
- His strengths include orchestrating resources, leading teams, and achieving remarkable results.
- He is skilled in strategic planning, effective communication, and identifying business growth opportunities.
- In his role as an Information Security Manager, he ensured robust security measures, tracked changes, and maintained secure operational environments.
- As a Business Systems Analyst, he demonstrated his ability to manage intricate AI and BI projects, oversee system upgrades and navigate network management.



Dávid Ondruš

Artificial Intelligence Lead Developer

- Lead developer with over 7 years in the software industry, with a strong focus on backend development and team leadership.
- He began his career as an Android developer, gaining valuable experience in C#, .NET, and Xamarin.
- Currently serving as a Software Architect and Backend Developer, he primarily focuses on building robust information systems, leveraging his diverse technical background to ensure efficient and effective solutions.



Tibor Hanesz

Artificial Intelligence Software Architect

- An experienced full stack developer with over 8 years of experience, deeply passionate about solving problems through web application development and software design.
- Having strong track record in creating and developing web applications, cloud software, and solutions.
- Proficient in several programming languages. Skilled at testing, debugging, upgrading, and enhancing products and solutions to deliver a superior user experience to customers, meeting business requirements, and ensuring enhanced security.

Touch4IT

Our world-class team consists of experienced professionals who graduated from top universities focused on computer science, design, management; and have PhDs.

20+

Years of Experience and Many Delivered Solutions to Hundreds of Clients in Many Industries.



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Case Studies

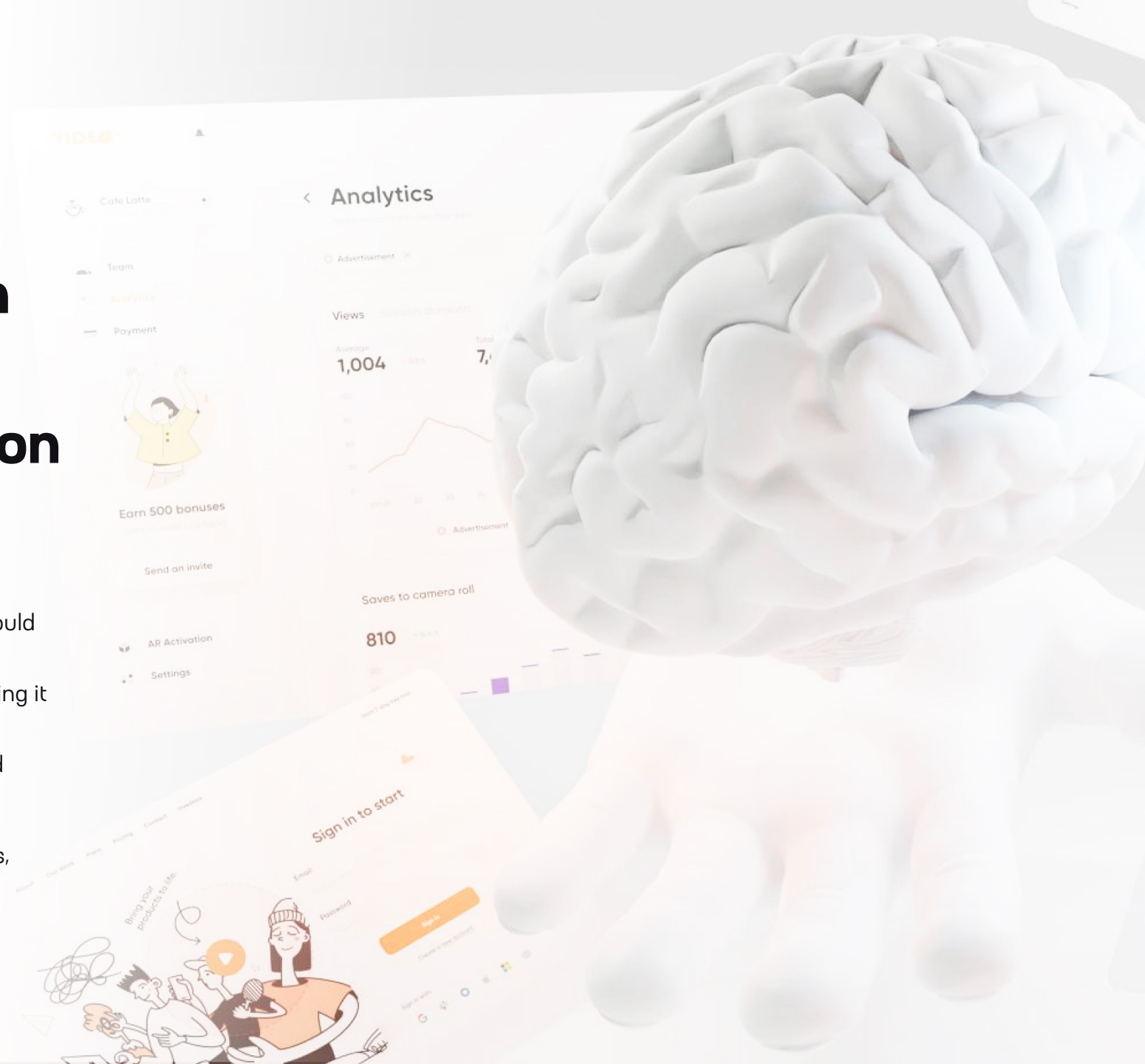
AI Implementation



Neural Network Research Focused on Improving Image Tracking Recognition in AR Apps

Research project focused on designing a neural network that could easily learn new NFT markers, recognize them, and locate them in near real-time on any image/video, almost in real-time, allowing it to run on mobile devices. This technology will be evaluated to enhance VideoBomb's WebAR platform that transforms brand interaction into a dynamic AR experience.

It allows them to showcase their products, deliver key messages, and establish stronger connections with their target audience, driving business growth and leaving a lasting impression.



Private Chatbot

We have developed our internal private chatbot (similar to ChatGPT). It can be used for communication through the tools like Mattermost or Slack, for processing text and text files, from which it can extract information and forward it.

Team Communication: Enhance team interactions by providing instant access to information directly within messaging channel.

Employee Support: Serve as a first-level support agent, providing instant responses to frequently asked questions by extracting relevant information from internal knowledge bases or documentation.

Training and Onboarding: Aid in the training and onboarding process by offering instant answers to queries about company policies, procedures, or systems, thus improving the learning curve for new employees.





AI Document Assistant for Large International Organization

Based on OpenAI technology, our system enhances interactions by analyzing over 3,000 documents, each over 100 pages. It improves search efficiency by pre-filtering documents based on user criteria and can interact with external systems through API calls, ensuring that the information provided is both verified and checked for accuracy.

The System Operates in Three Modes:

- Refinement Phase: Focuses on understanding and refining the user's request to ensure accurate and relevant responses.
- Simple Answer Mode: Delivers information and direct answers promptly by extracting and rephrasing content from documents.
- Reporting Mode: Undertakes multi-step tasks for complex analyses, including calculations, comparisons, summarizations, and data extraction





Touch4IT Academy

As part of our own educational project called 'Touch4IT Academy,' we organize several diverse courses focused on education, sharing our extensive experience, and nurturing the developer community.

One of the recent courses is the 'Artificial Intelligence' course, where our R&D team lead Peter serves as the lecturer, instructing participants in various technical subjects and sharing many of his practical experiences.



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Other Projects



MyOwnDoctor

Putting Patients on the Digital Path to Better Health

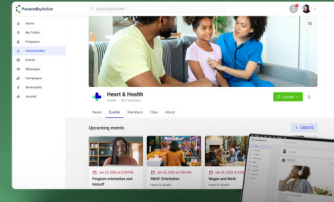
Platform Used by America's Largest Pharmacy Network



esa

Helping To Launch Satellites Into Space

Developed With The European Space Agency As Part Of PECS



poweredbyaction

Building Strong Digital Communities

More Than 100 000 Active Users Across 60 Organizations



Development of a Web Portal for Coca-Cola's Customer Engagement Campaign

Web portal for Coca-Cola, one of the world's largest beverage companies. The portal allows customers to access all necessary information and measures to prevent any potential risks. It also established a logical structure for the random winner selection process is bot



FERRERO

Optimizing Product Management Giving More Nutella To The World

Increasing Efficiency & Growing Sales For Ferrero In Europe



seesame

The First Facebook Chatbot to Detect Fake Messages

We have developed a conspiracy-detection chatbot called Checkbot for the Seesame project. Users can send a link to an article to Checkbot, and it will analyze if there is anything suspicious or misleading about it. Besides the chatting algorithm, under human guidance, Checkbot can actively participate in discussions. It is available to over 2.7 million Slovak people on Facebook.

Discover More on Our Website

touch4it.com/case-studies



Interested?

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Clutch

5.0 ★★★★★

Highly Rated by
Customers