



Sk[ai]HUB

AI projects for sustainability



SKOLKOVO AI HUB PROJECT

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SUSTAINABLE DEVELOPMENT GOALS



AI for SDGs Project

Aim

- Develop successful projects applying Artificial Intelligence to bolster the UN Sustainable Development Goals.

Structure

- The program consists of 4 stages designed to mature the technologies offered by the Russian high-tech startups.
- The final stage focuses on cross-border cooperation, including an online business-mission to Switzerland in October 2020.

About Skolkovo AI Hub

Overview

- Sk AI Hub is an ecosystem for global development and interaction of Russian AI projects.
- <https://skai.sk.ru/en/>



Solution

Palm Jet is a contactless compact palm vein pattern scanner that can be used as a highly-accurate form of identification, thus providing access security.

The high-precision biometric identification method is based on infrared scanning.



Company Background

BIOSMART develops, manufactures and implements high-tech devices and software products for human identification by fingerprints, palm veins patterns and face. To date the company's technologies have been implemented 5000 times across 20 countries. The company has its own workshops, a testing lab and a "clean room". The company is headquartered in Yekaterinburg and has representative offices in Moscow and Prague.

<https://palmjet.site/>

Solution

Just AI is engaged in the research, development and implementation of conversational artificial intelligence in business. Just AI offers an in-app voice assistant SDK, Aimybox, which allows users to easily create a custom voice assistant for any application or device. Natural Language Understanding and the definition of semantic terminology allows AI systems to completely replace people in solving the problems of large corporations and small companies.



Just AI

Company Background

The company is a part of a major Russian IT group (i-Free). Its headquarters and R&D office are located in St. Petersburg with representative offices in Moscow, London and Shanghai. Some of its clients include Alfa-Bank, UniCredit Bank Russia, MTS, Yandex, McDonald's.

<https://just-ai.com/en/>

Solution

GreenOCR technology ensures high quality and speed of document recognition while minimizing energy consumption and environmental impact. All calculations are performed without the use of additional computing accelerators. This ensures that applications with the integrated SDK run well even on devices with low computing power.



Company Background

The company specialises in researching AI, with particular expertise in computer vision software. The AI-based recognition systems support public and private organisations worldwide by significantly improving business processes through superior document scanning and analysis. The company combines a customer-first mindset with a relentless focus on research and development.

Solution

A mobile application for remote detection of the malignant skin disease and determining the probability of patient developing such based on the analysis of images and risk factors using neural networks. The app uses photograph images and other data and generates recommendations on whether the patient should visit a doctor. The neural network used for the analysis was trained on several thousand diagnosed cases and works under the continuous supervision of doctors.



Company Background

The Prorodinki system was developed with the participation of the leading Russian skin cancer experts. The system has been tested by the Privolzhsky Research Medical University (PIMU), demonstrating greater detection accuracy than an average dermatologist. Medical personnel is performing supervision of the system to ensure continuous quality control.

<https://www.prorodinki.ru/>

Solution

The company develops Medical Decision Support System - a cloud system that uses automatic analysis of medical data in order to predict the risks of developing diseases and provide personal recommendations on clinical cases to doctors and patients. The system can be integrated with any type of medical information system. It analyzes electronic medical records using artificial intelligence methods.



Company Background

Since its inception, the company has launched two pilot projects covering different regions of Russia. The second pilot revealed that the use of the system led to x7 increase in the detection rate of the high-risk patients. In April 2020 Webiomed software system obtained registration in Russia under the category “medical devices”. It is the first software product with artificial intelligence that successfully passed technical and clinical trials and received permission for medical use in the Russian Federation.

Solution

Project LeVIT looks for an individual treatment for hereditary cardiac diseases. It works on the basis of data analysis and computer vision.

LeVIT collects patient data into a single database and formulates a model, which allows patients to receive automatic consultation, thereby making it more accessible.

N A P O L E O N I T

Company Background

Founded in 2011 as a digital publishing platform developer, today the company specializes in machine learning and employs over 130 analysts, developers, data scientists, system designers, QA engineers, designers, and managers delivering solutions in a variety of technology stack to drive digital transformation.

<https://napoleonit.com/>

Solution

SaaS platform provides data analytics from drones and CCTV to control waste management and optimise recycling. The system analyses location, assesses the volume and composition of garbage heaps and other relevant data. It also automates the issuance of related fines.



Company Background

Warden Machinery is a Russian company for development and integration of machine vision based industrial solutions. The company's solutions are successful both in national and global scale.

<https://warden.pro/en/home-2/>

Solution

FarmManager is a solution that allows to automate inspection of wind turbines and detection of possible operational defects on the surface of the blades implemented with the help of drone photography. The technology allows to reduce the amount of time necessary to combine, process and analyse received images. The solution also includes a mobile application for drone control that monitors shooting conditions and flight plan. The technology has already been tested at wind farms in Denmark, Sweden, Germany in partnership with Helvetis (Switzerland).



Company Background

Singularis Lab is a software development company. To date the company has implemented over 40 projects in different areas, from warehouse accounting and everyday operations automation to scientific programs in high-performance computing. The areas of specialisation include: web, desktop and mobile applications, HPC and engineering applications, computer vision, conferences, robotics, components and utilities, signals processing etc.

<https://singularis-lab.com/en.html>

Solution

Distance sign language interpretation service that allows organizations to provide an accessible environment for the hearing-impaired at minimal cost, and the deaf get access to communications on an equal basis with everyone.



Company Background

SOL - smart translations offers a SAAS service that allows people to communicate via mobile app without translational problems.

If any of the listed solutions can be of interest to your company or organization, we offer to arrange an online introduction and pitching, please, contact us at:

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