

Pro Vision Lab

Passionate about building the next generation of computer vision and machine learning technology.



We develop turnkey solutions and innovative applications involving object detection/tracking and we've been working in this field since 2014!



ABOUT US

- We are a team of Computer Vision experts, passionate about innovation in face recognition technology.
- Our R&D-centers are based in Kiev and Kharkiv, we are focused on applying AI, machine learning, computer vision and intellectual data analysis technology.
- Our technical team consists of computer vision engineers, researchers and developers with good sound skills in the fields of image processing and face recognition.

OUR TEAM

We are a tight-knit team of data science professionals, architects and software developers. We have over 5 years of expertise in building computer vision solutions and image processing applications.

We have a seriously deep bench of cross-industry experts.

A multi-disciplinary team with strong technical and mathematical skills:

- Developers (C/C++, Java, .NET, Python)
- Designers and architects
- Project managers
- Data scientists and experts in computational mathematics
- Researchers in computer vision



WHAT WE DO



We develop desktop solutions with computer vision capabilities, cross-platform applications for Windows, Mac and Linux. We are also good at other aspects such as mobile app & website development.



We've been focused on building face recognition solutions in various difficult scenarios, such as recognition at distance and in complex backgrounds.



Our tech team also is working on projects involving plate recognition, real-time object detection and tracking, people and vehicle counting.



EXPERTISE

- **State of-the-art tools for linear and nonlinear pattern classification:**
Classifier design using SVM, Neural Networks, Random Forest, KNN etc
- **Various open source tools for image processing and advanced computer vision algorithms for facial processing, analysis, and recognition:**
Image registration, C/C++, OCR, OpenCV, ANPR (Automatic Number Plate Recognition) and other object tracking/counting and recognition technology and libraries
- **Proficient in Python programming and web technologies:**
Python/Django, .NET, C#, HTML/CSS, Redis, Javascript, JQuery, as well SQL, Apache

WHAT SETS US APART?



COST-EFFICIENCY.

We are doing our best to be both: cost-effective and also efficient in terms of resources, time and productivity.

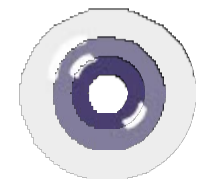


OUR COLLABORATION SCENARIOS ARE VERY FLEXIBLE.

We offer a scalable array of engineers who we rotate depending on the skills required.



WE CAN ADAPT pretty much to any customer, no matter what they use internally: be it scrum/agile, kanban, waterfall, iterations . We make sure the process is fully managed and no micro-management is required.



OUR MISSION



We intend to uncover the full potential of cross-platform open-source library, OpenCV and relish a challenge of improving the accuracy of object detection and face recognition performance.

We are striving to become one of the leaders in automated visual security apps and deep learning face recognition!

Because we see the immense potential of CV technologies to fundamentally transform society.



CASE STUDIES

CASE STUDY



Here are few case studies, which can help demonstrate our abilities best:

Upon request of an innovative aero-vision company, Provision Lab developed a vision application that tracks and identifies objects in real-time video.

Our technical team faced a challenge to build a lightweight but powerful application that can count the number of cattle and sheeps on the basis of the video attained from the drone.

There were options both for video which is recorded on MicroSD/SD card as well as through real-time video streaming.

We managed to quickly cope with this technical challenge using an objects detection algorithm, also applying KSF tracker and neural network training.

Technical Stack

Tech stack: C++ / Caffe / Qt

Timeline of Development:

6 months

Team:

5 developer

CASE STUDY

We believe, our projects and clients' testimonials speak better than words:

A next generation Internet gaming/gambling company asked our team to develop for them an innovation vision application that can track and identify objects in real time.

Our task was to create an application that detects and recognizes cards in the casino on the basis of the video attained in streaming video from the securities cameras.

This technical challenge was resolved by the automated object detection algorithm, also applying convolutional neural network training.

Technical Stack

Tech stack: C++ / Cafee / Qt

Timeline of Development:

6 months

Team:

5 developer

CASE STUDY

We are happy to demonstrate working objects recognition in action:

An early stage movie startup company addressed Provision Lab with request to developed a vision application that tracks objects in real-time video.

Our developers successfully coped with a task to build an app for AF Filming equipment on a basis of video attained from camera.

In addition to autofocus issue, this technical problem was resolved with an Object retention after passing through barriers and face recognition.

Provision Lab successfully coped with this task by using detection of objects and applying KSF + Yolo tracker and neural network training.

Technical Stack

Tech stack:

C++ / Caffe / Qt / KSF / Yolo

Timeline of Development:

6 months

Team:

5 developer

CASE STUDY

We are always happy to provide references from our clients, they're all super happy with how we coped!

A very promising security systems startup contacted Provision Lab to develop for them a vision application that recognizes and tracks objects in real-time while the live video stream is being broadcast from a device or camera.

Our technical team had to build an application for human object and human motion recognition on the basis of video received from the camera in real-time.

This technical problem was solved using detection of objects and applying opencv tracker and neural network training.

Technical Stack

Tech stack:

C++ / Caffe / OpenCV / Qt

Timeline of Development:

6 months

Team:

5 developer

CONTACTS

Thank you, looking forward to working with you.

For any questions or concerns, don't hesitate to get in touch!

Provision Lab

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