asya

...ting AI, software and design of the future.

Look into the future

Team

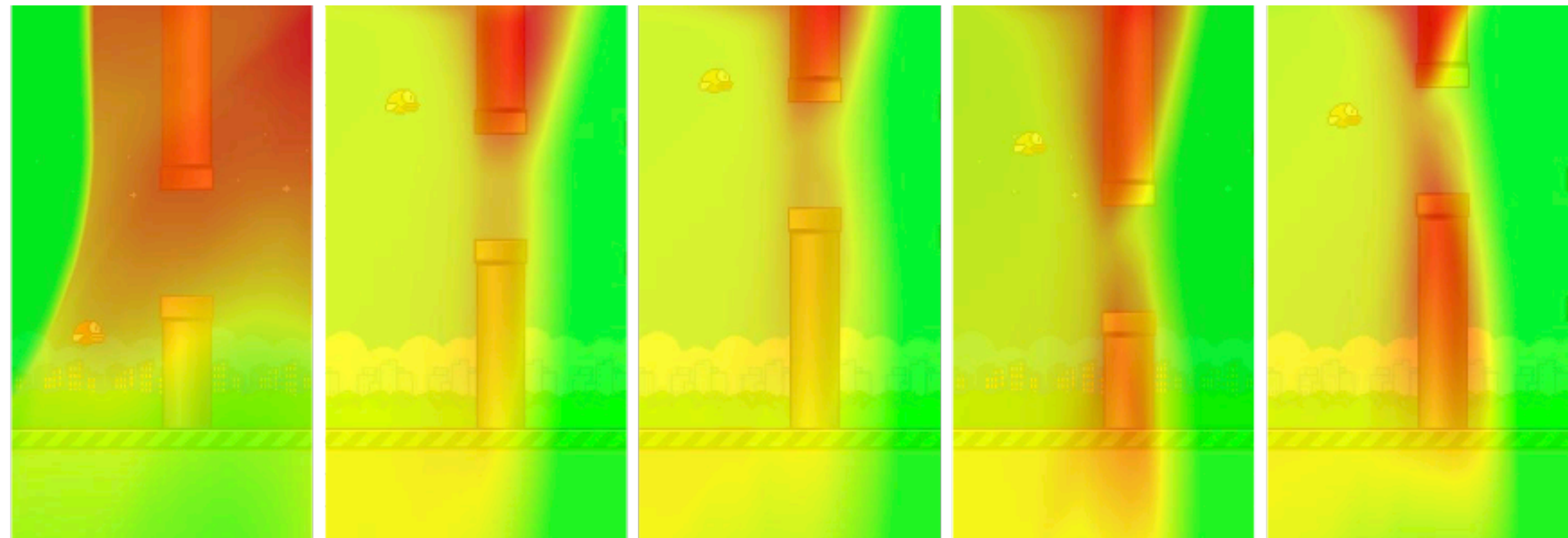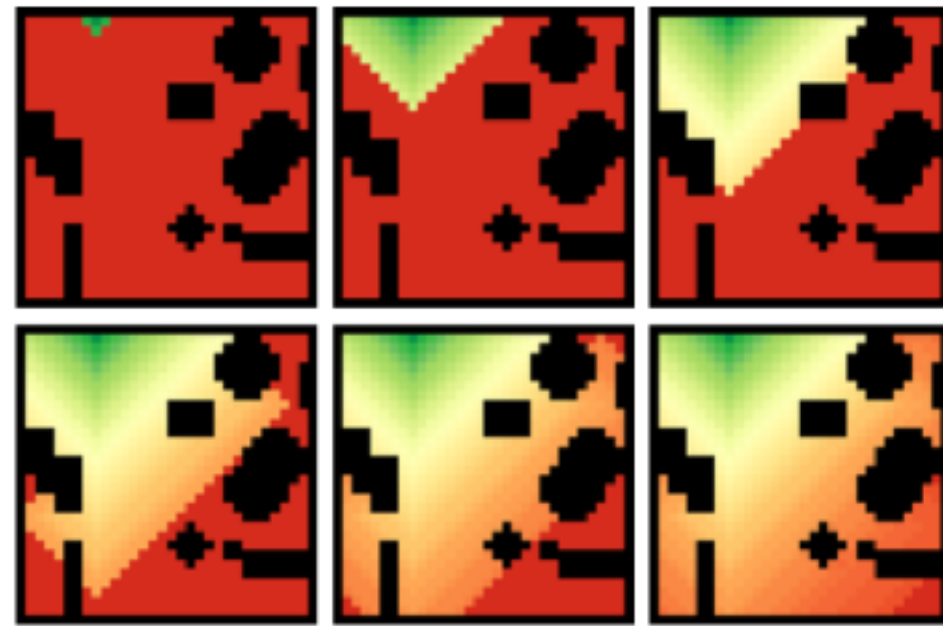30+ employees

Award-winning scientists and UX designers

20+ scientific publications

https://www.asya.ai/publications/

Over 20+ academic research project

Dr. Evalds Urtans has been leading BSc., MSc. and PhD. Students research projects for over 8 years in the domain of deep learning. Especially in Deep Metric Learning and zero-shot learning.
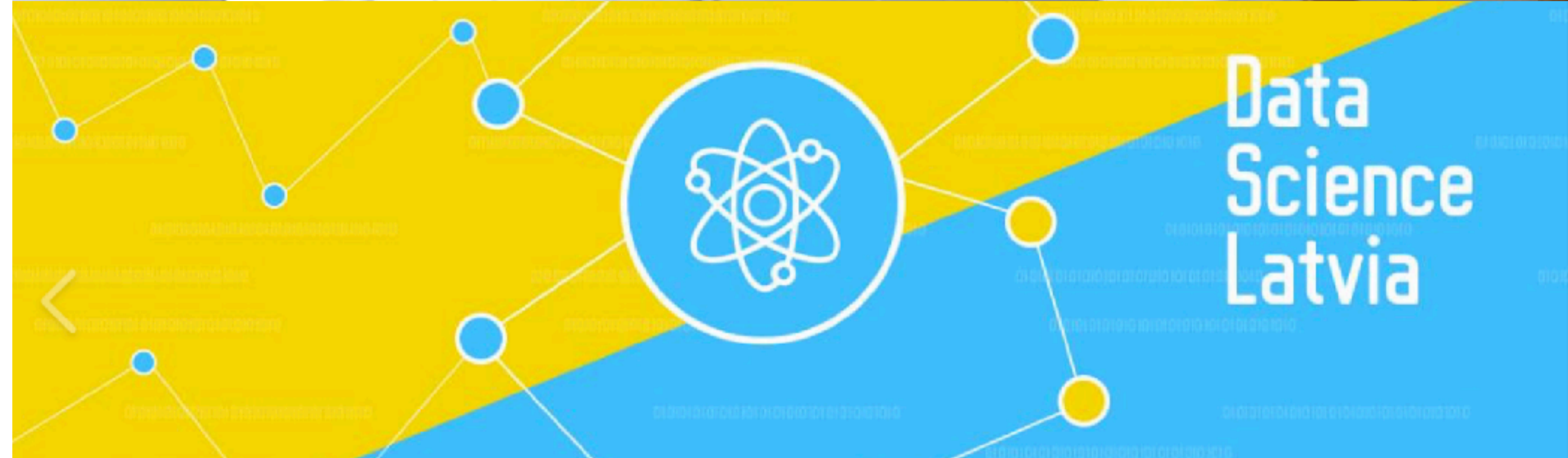
Comunity

mila.lv

Monthly AI paper reading meetups, gatherings for students from all research organizations in Latvia: RTU, LU, EDI, VeA, and more.

RiGAN ML MEETUP #3

Feb 28 | 19:00

Place: Zunda towers, Rīga

SPEAKERS

Roberts Kadiķis
Data Augmentation for Industrial and Medical Applications

Kaspars Grosu
AI in Latvian Healthcare

Project #1 – Detection of defects in wooden planks for automatic cutter.

Successful project in cola with medium size company to obtain high-precision AI models for detecting defects in wooden planks to automatically plan cutting and manufacturing processes. 70-99% precision to various classes of damage.
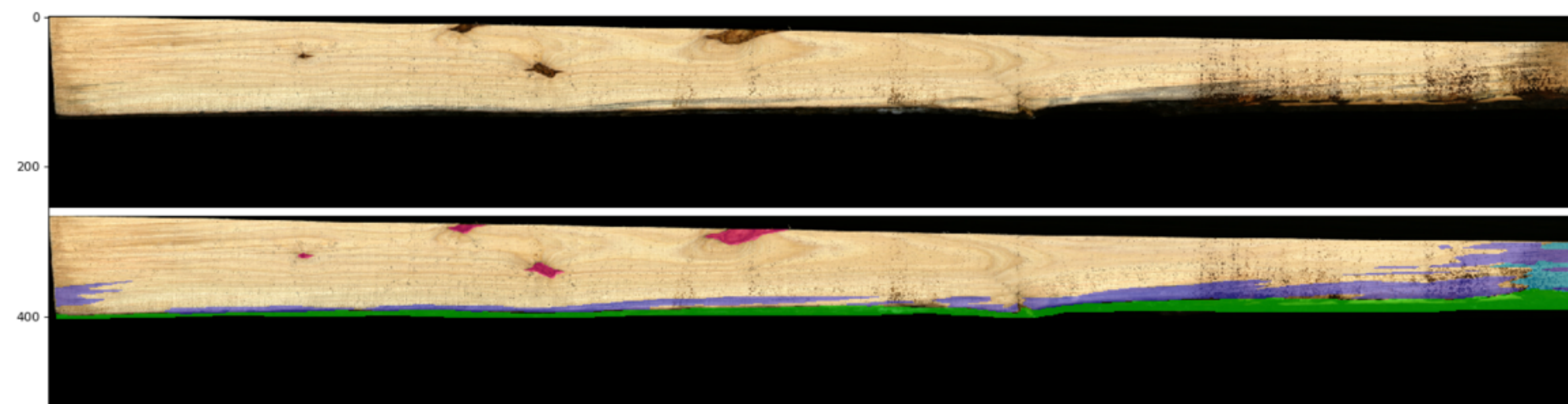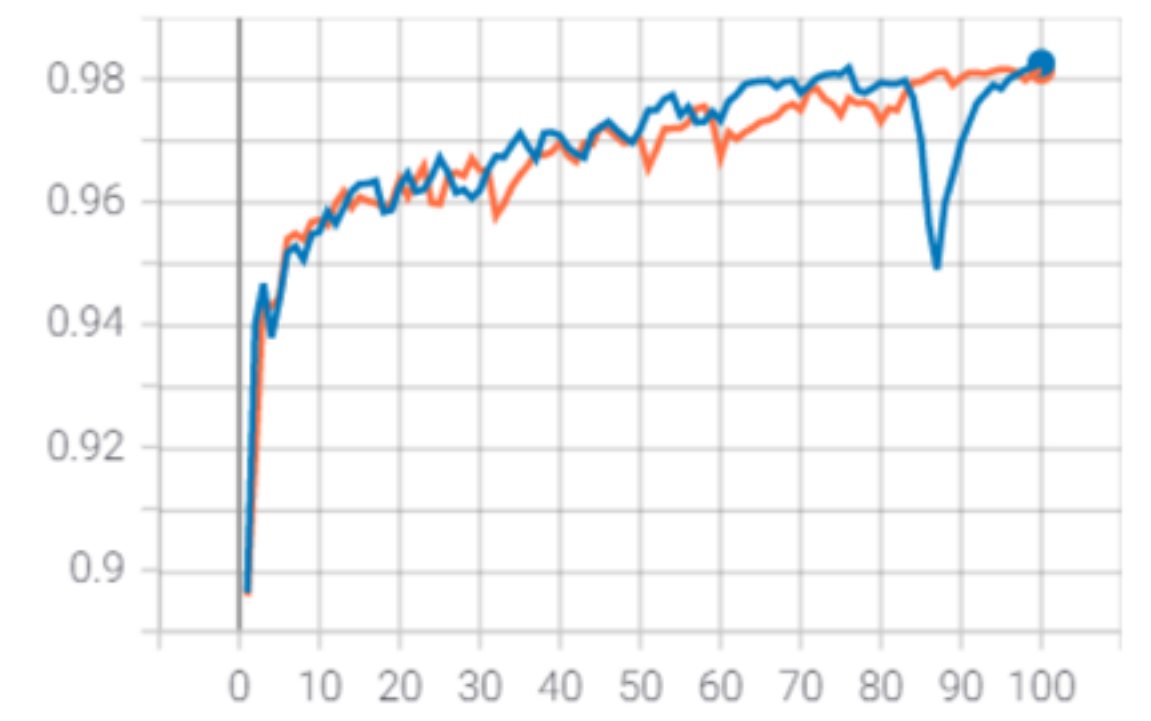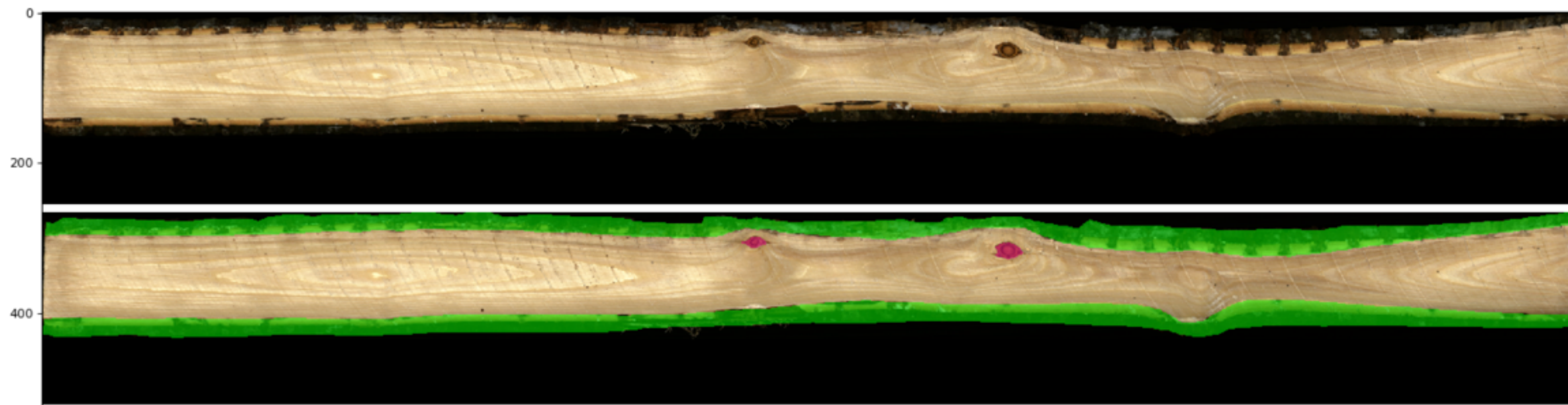**Published BDAI 2022**
Partner: http://www.zippyvision.com
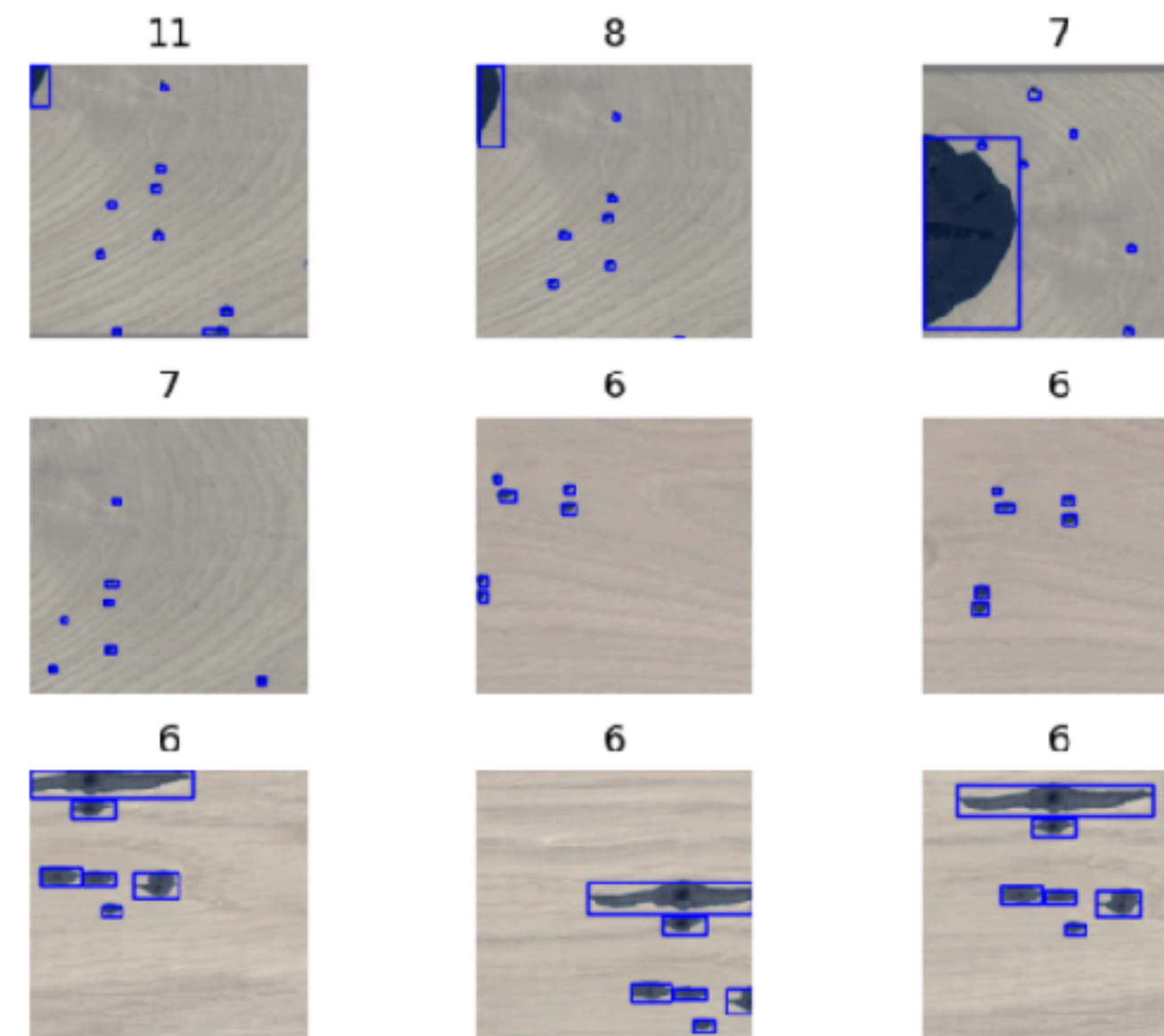
Project #1 –
Detection of defects
in wooden planks for
automatic cutter.

Project #2 – Detection of damage for car rental service using photos.

Successful project to segment different types of defects in cars using mobile phone after returning them to the rent and before re-selling. Especially difficult problem, because even human labelers cannot distinguish between reflections and dents. 0.88 IoU for scratches, dents, chips, dirt, rust.
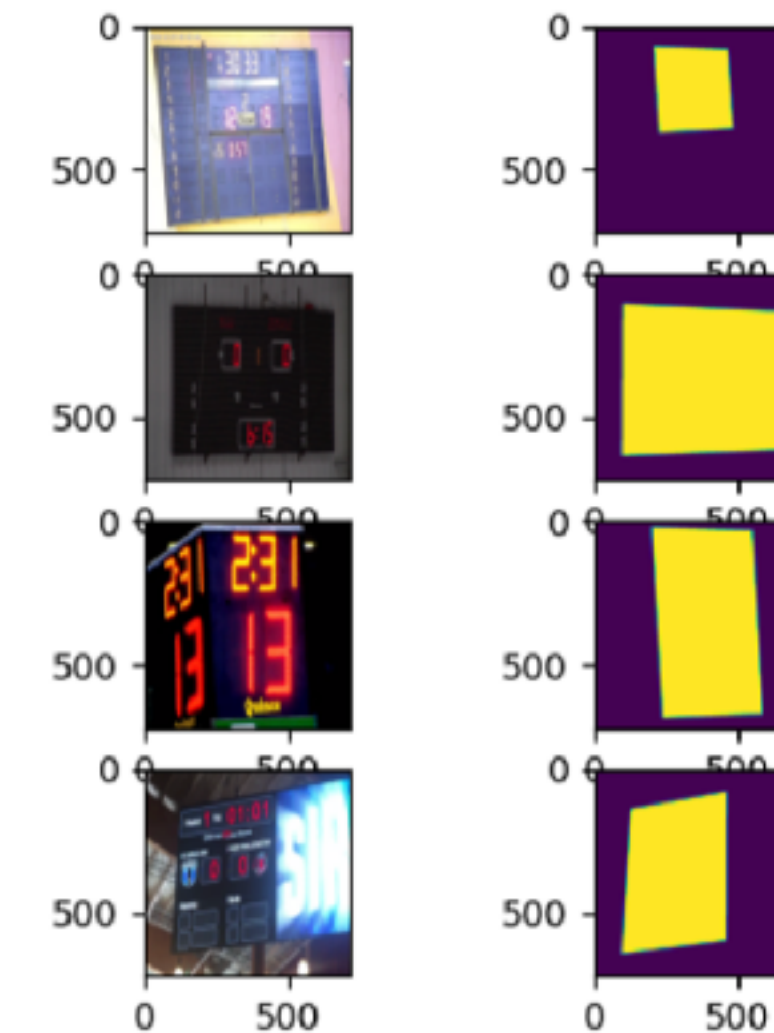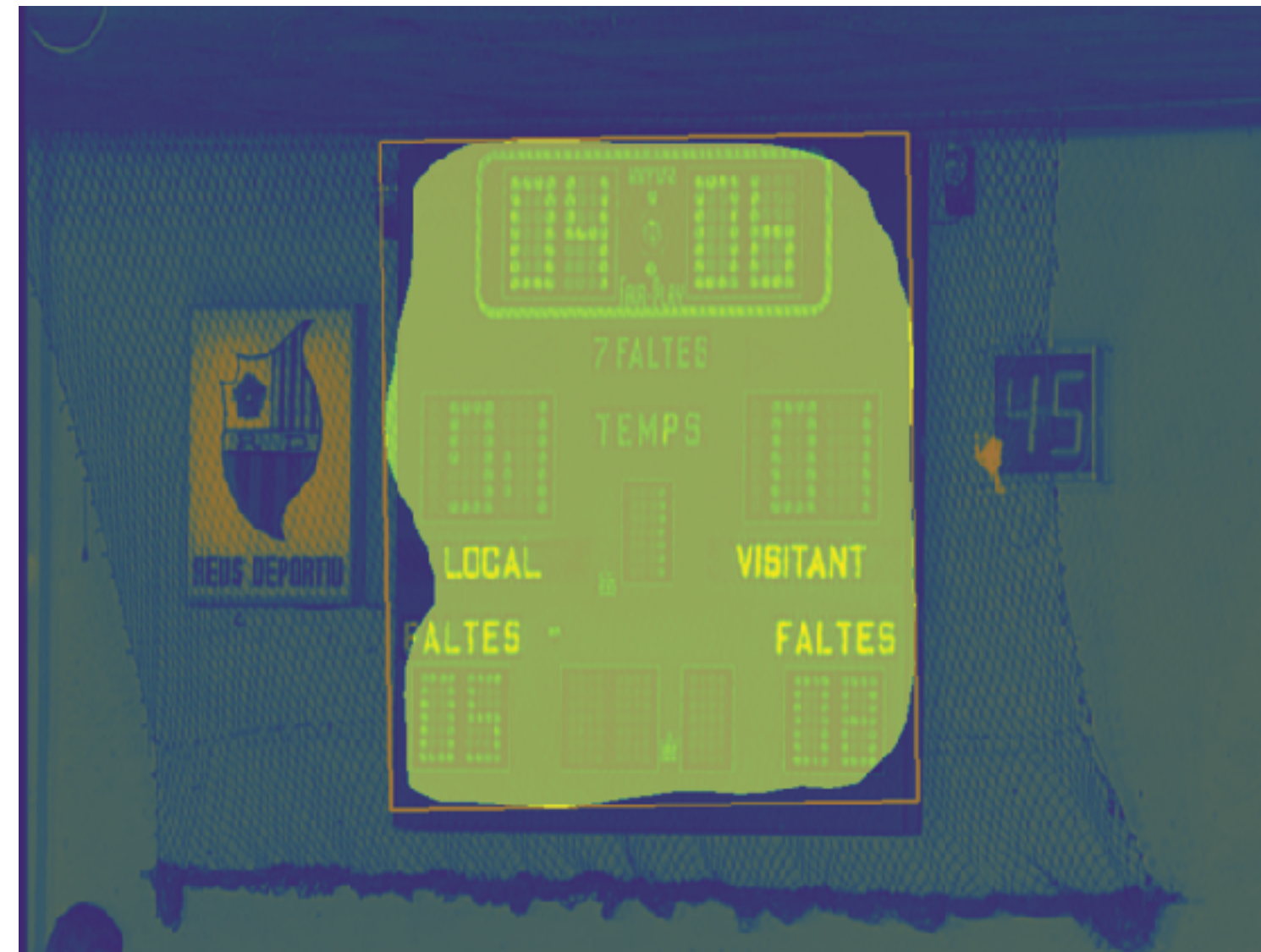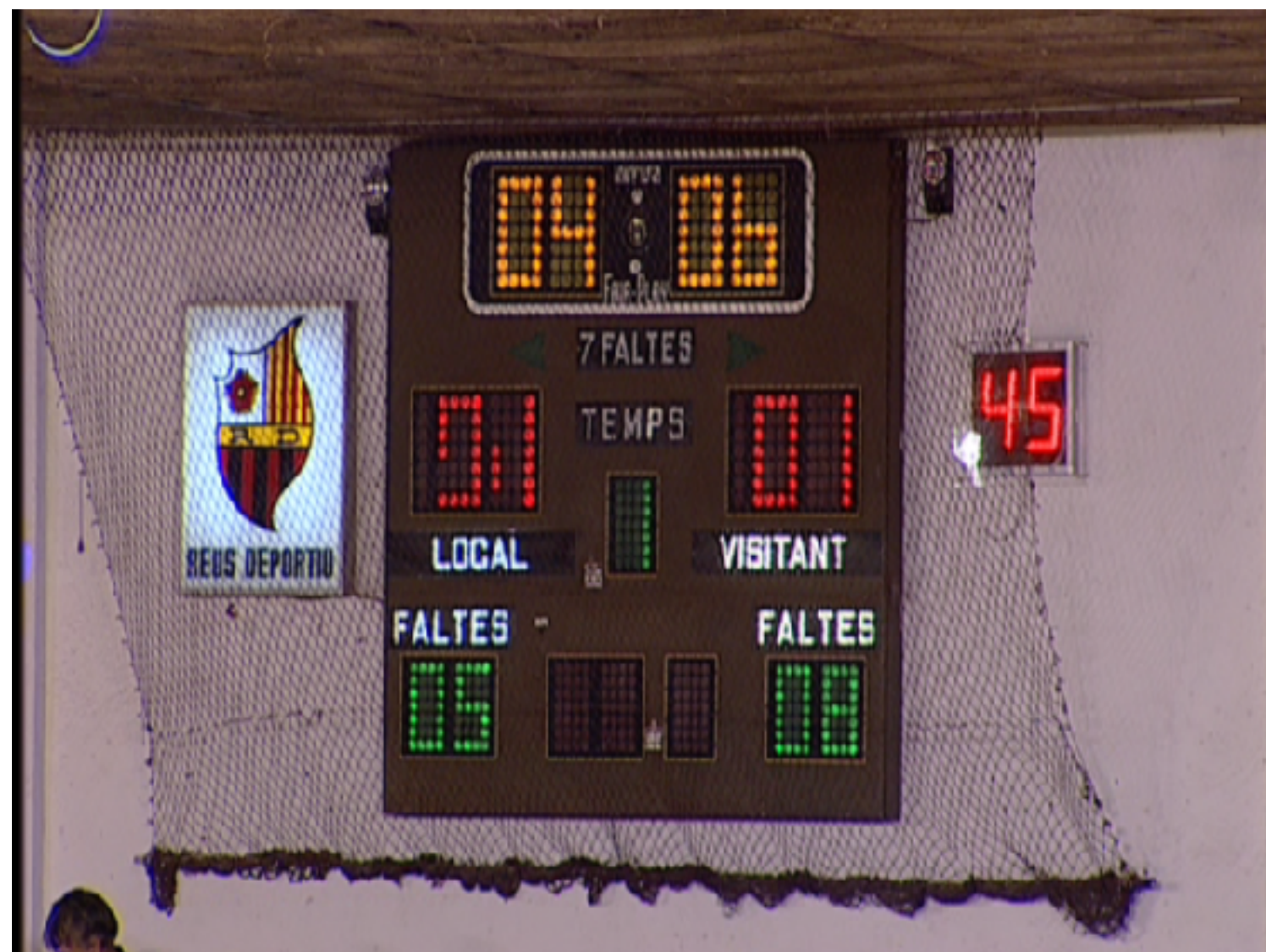Partner: http://www.scopetechnology.com

Project #2 – Detection of damage for car rental service using photos.

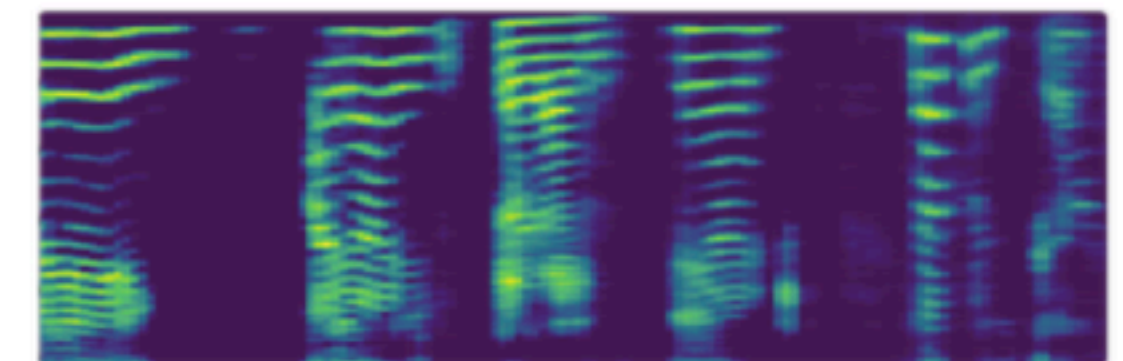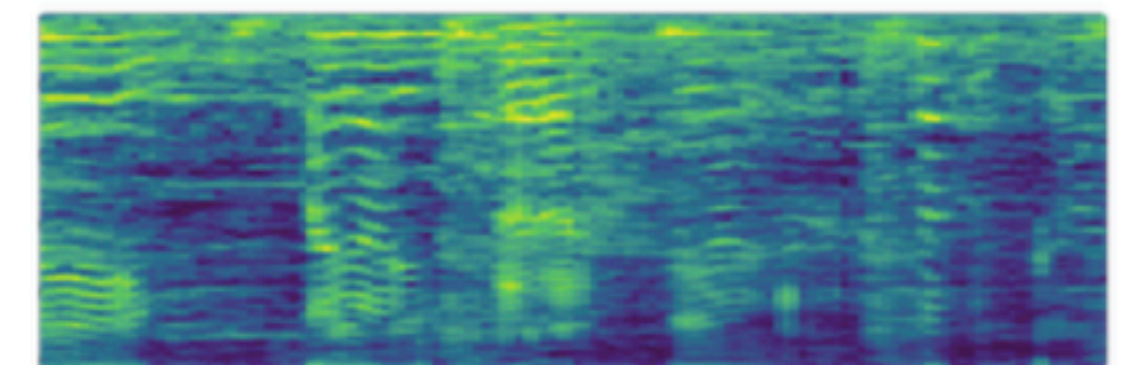# Project #3 – Detection of tabloid for sports game tracking.

Project #4 – Speech enhancement for microphone manufacturers.

Before (noisy audio)

After (clean audio)

Successful project with one of the largest microphone manufacturers in the region to denoise the audio signal in real time using deep learning models. Models can remove noises like: Sounds of speaker's feedback, Keyboard clicking, Traffic, Sounds of children in background, Other mechanical noises.

asya.ai PESQ: 2.595

krisp.ai PESQ: 2.266 (funding 17m USD)

Partner: https://www.catchbox.com

Project #5 – Point-cloud improvements using CycleGAN models.

Models that can fix poor point-cloud from poor hardware sensors into usable maps using CycleGAN type of models

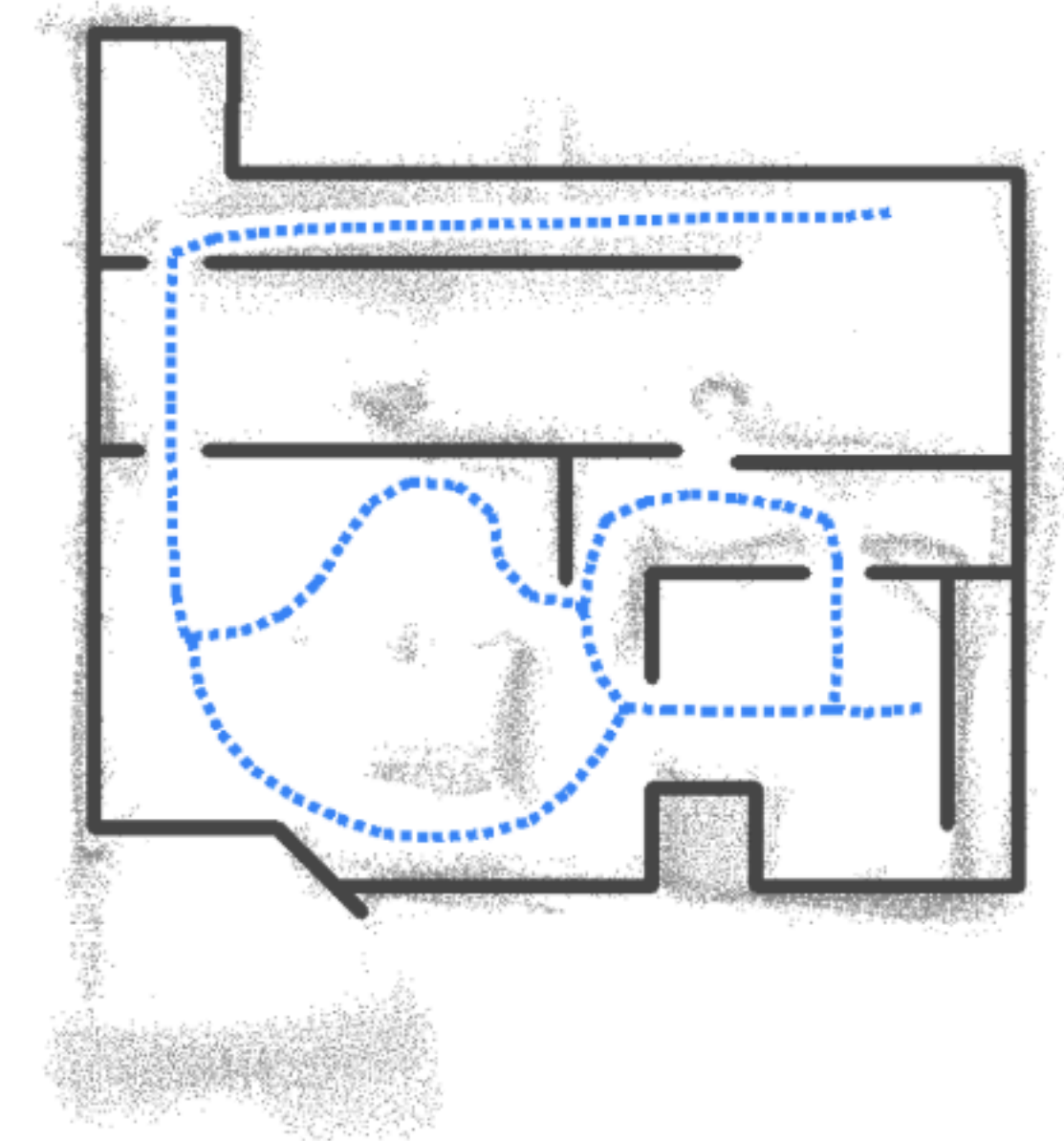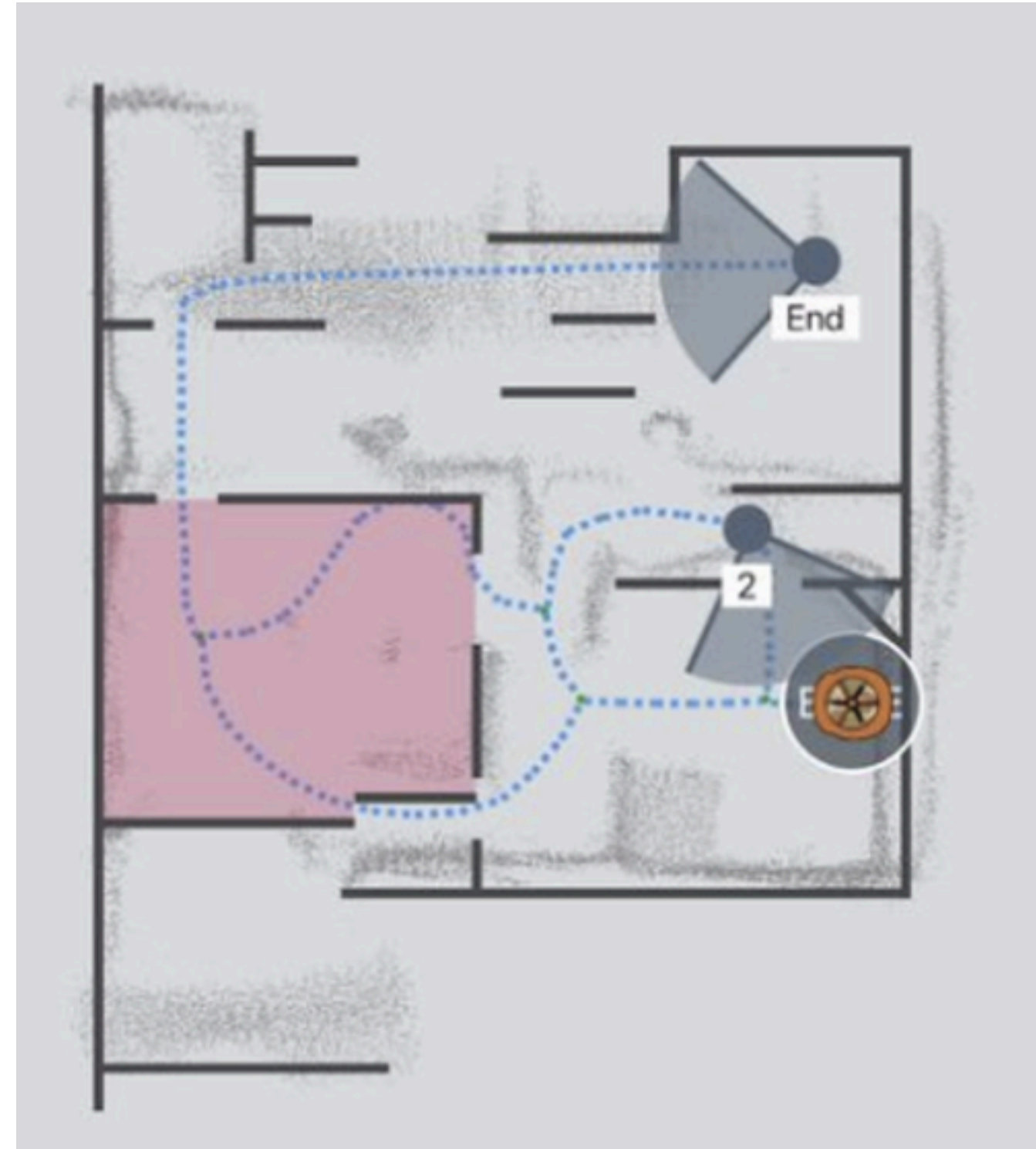Partner: NDA (USA company)

Before

After

Project #5 – Point-cloud improvements using CycleGAN models.

Models that can fix poor point-cloud from poor hardware sensors into usable maps using CycleGAN type of models

Partner: NDA (USA company)

# Project #6 – Solvent gradient optimization in Chromatography projects

AI models for finding solvent gradients to separate compounds in chromatography for analytical chemistry. Automatically executes experiments to reduce human resources from 2 weeks to 2 hours and achieve high-quality separation for unknown substances.
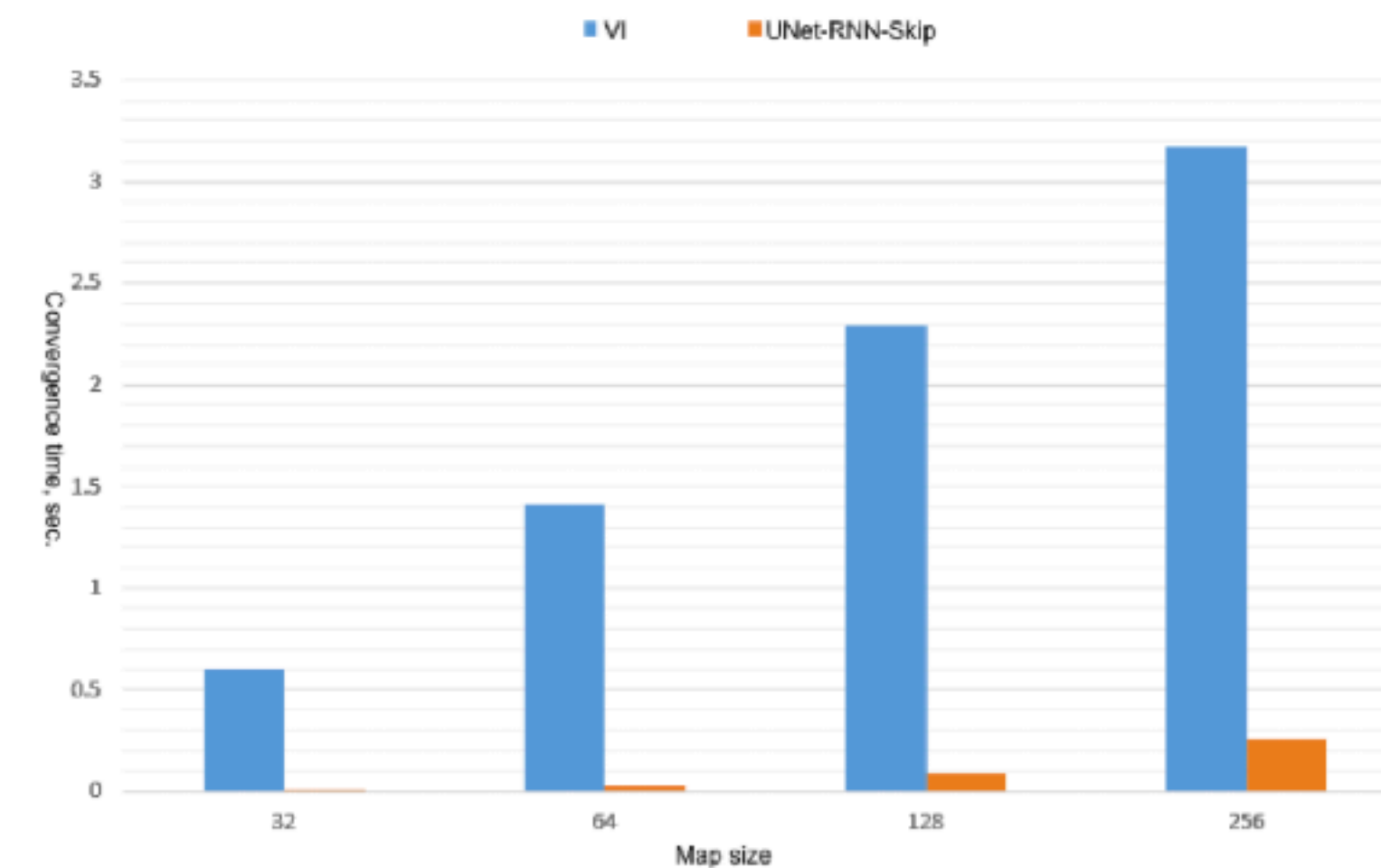Partner: https://www.chromsword.com
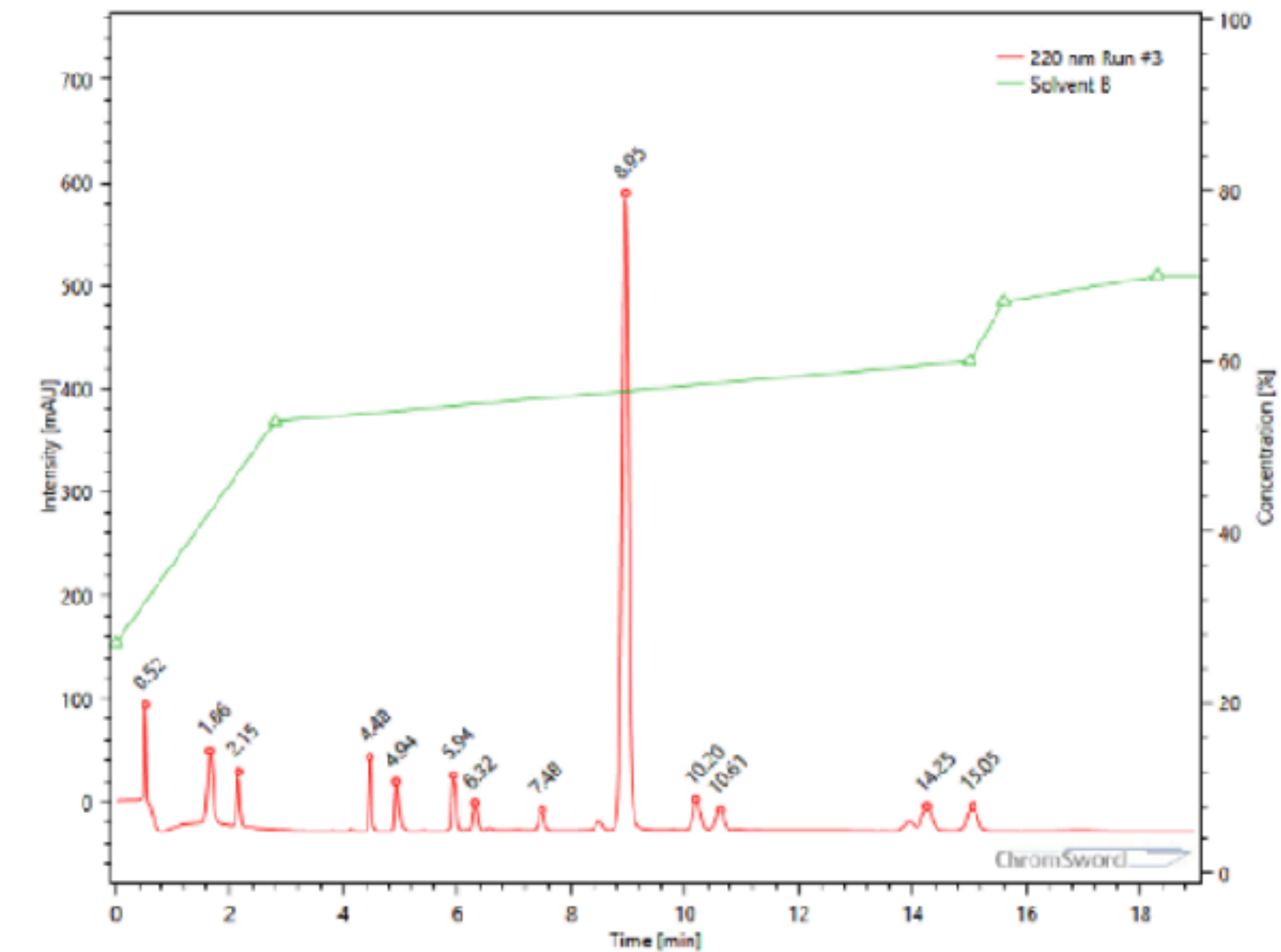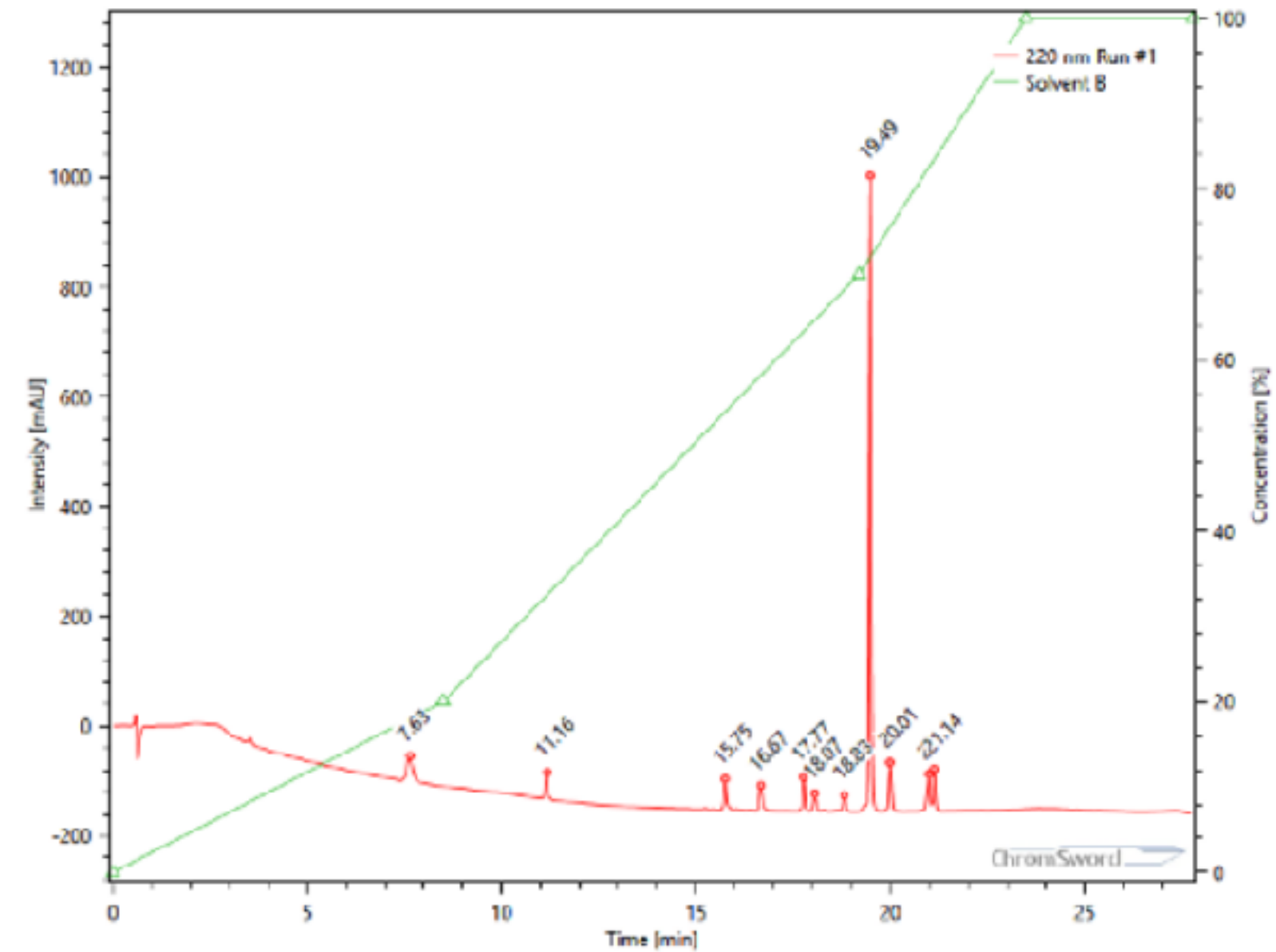
# Project #7 – Coverage and path planning for industrial cleaning robots.
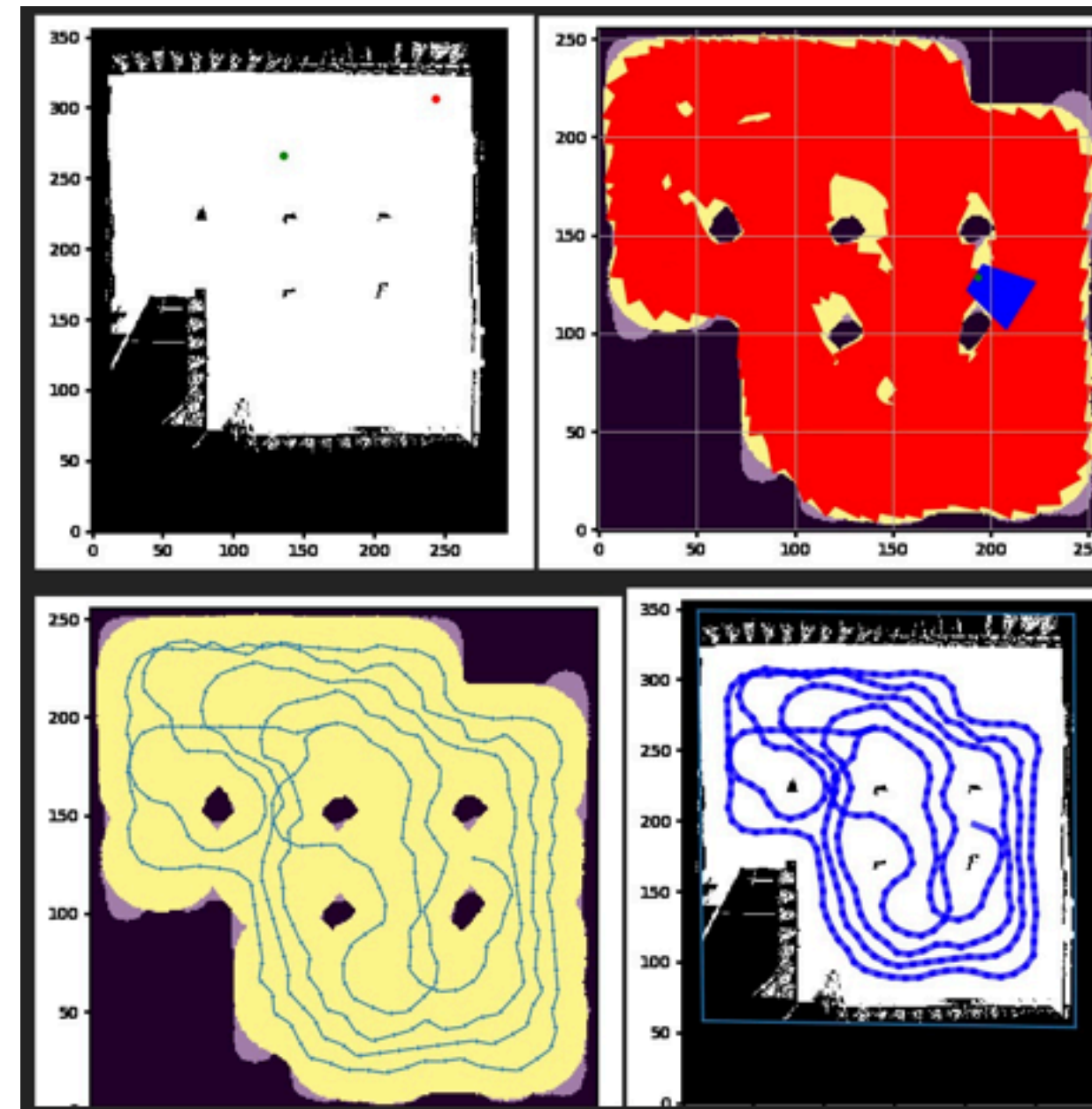
Models can autonomously explore environment and do value-based policy planning 10x faster than classical, non-deep learning algorithms. Coverage planning taking in account physical limitations of robot maneuverability.
Published ICoIAS 2020 (our IP)

Project #8 – AI to detect water quality using 6 sensor readings in real-time
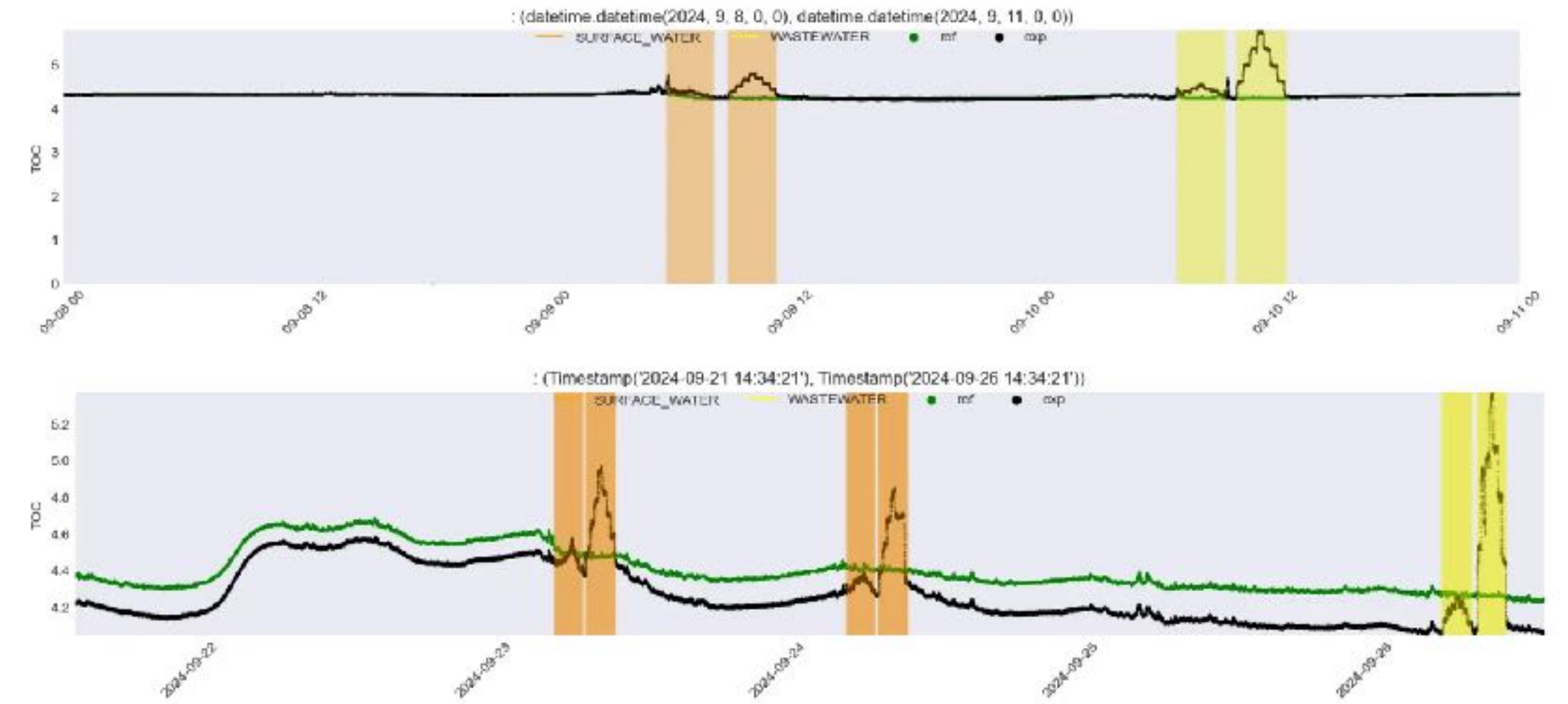
Waterson is an AI-powered water quality monitoring system that predicts biological contamination in drinking water using data from standard physicochemical sensors. The technology operates like a weather forecast system, analyzing conditions to predict contamination risks before they occur
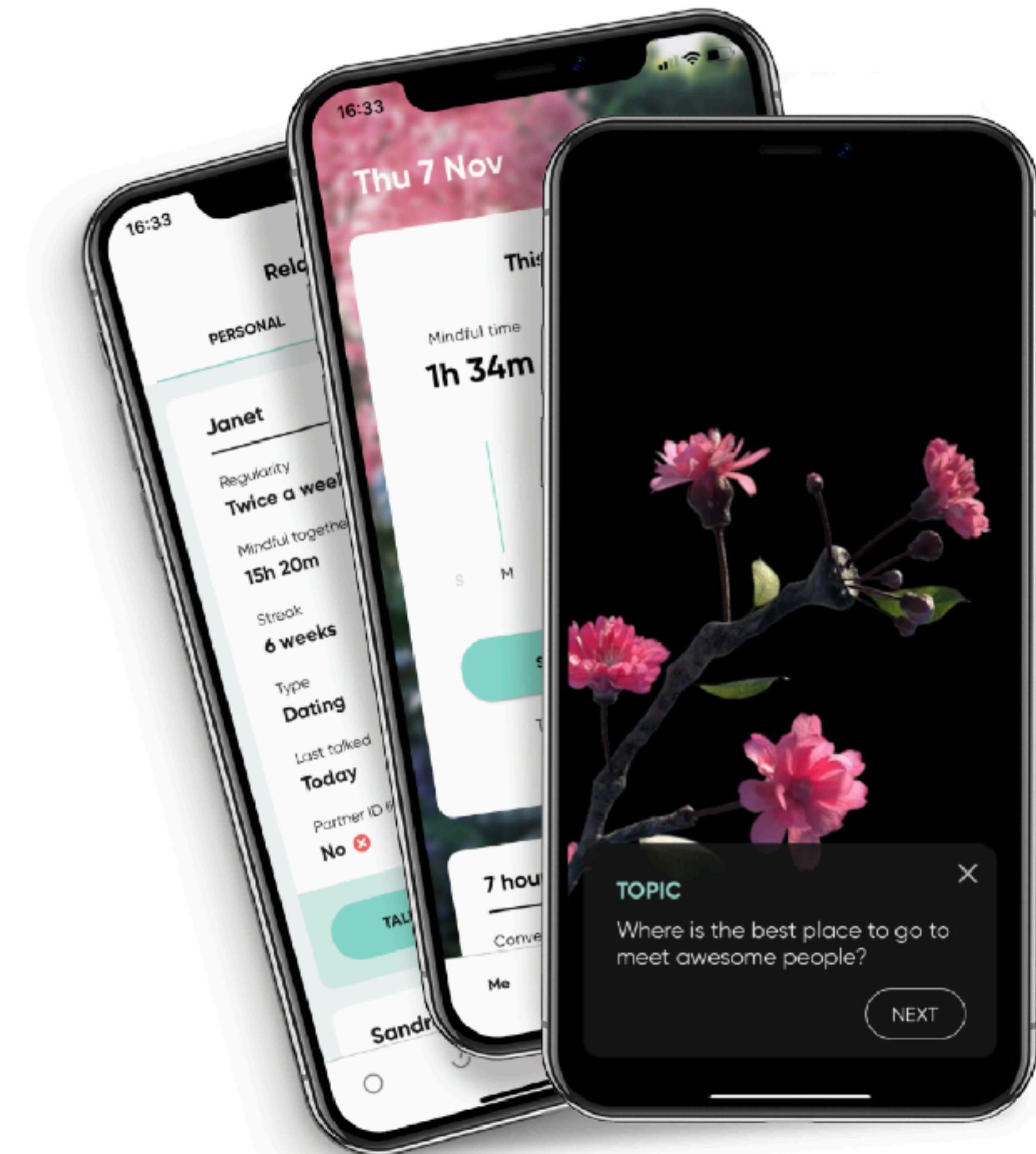
App #8 – "Closer to you" – couple's therapy app

Over 60k users, featured as Apple "App of the day" in many countries. Paid subscription business model. AI models for best conversation topics and emotion tracing.

https://apps.apple.com/us/app/closer-to-you-couple-game/id1326344785

Forbes

"The disruption potential for Asya app could be immense. In many countries, psychological services are either difficult to find, cost prohibitive or both."

App #9 – "Our.Love" – couple's app

Repackaging and improving "Closer to you" app for American market. Relationship tracker with lot's of functions
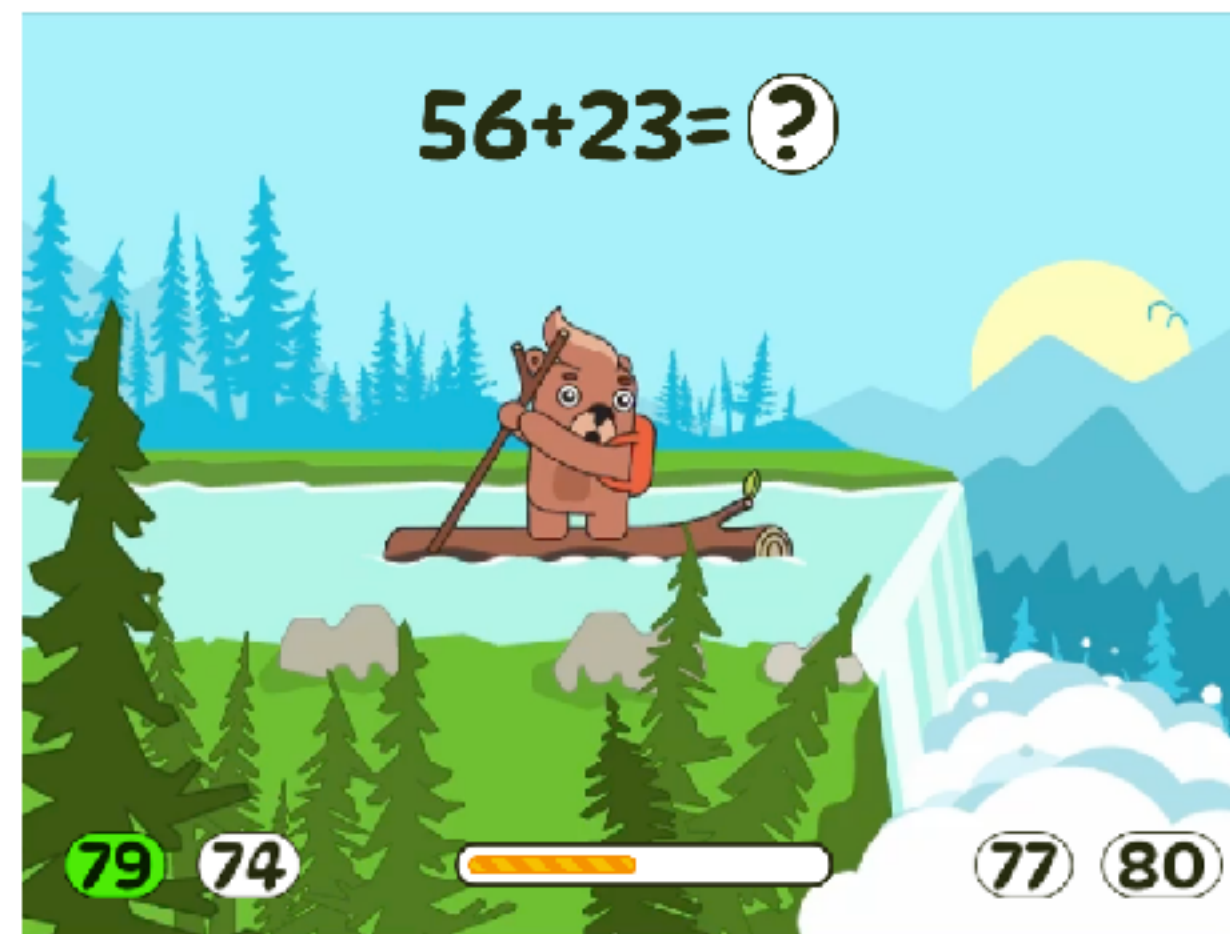
https://www.ourlovecompany.com/

App #10 – "Algo", Math app for 5–12-year-olds

Story-based, engaging math app for kids, models to predict personalized tasks to help advance mathematical knowledge. Currently testing in Latvia, global market potential 100m USD
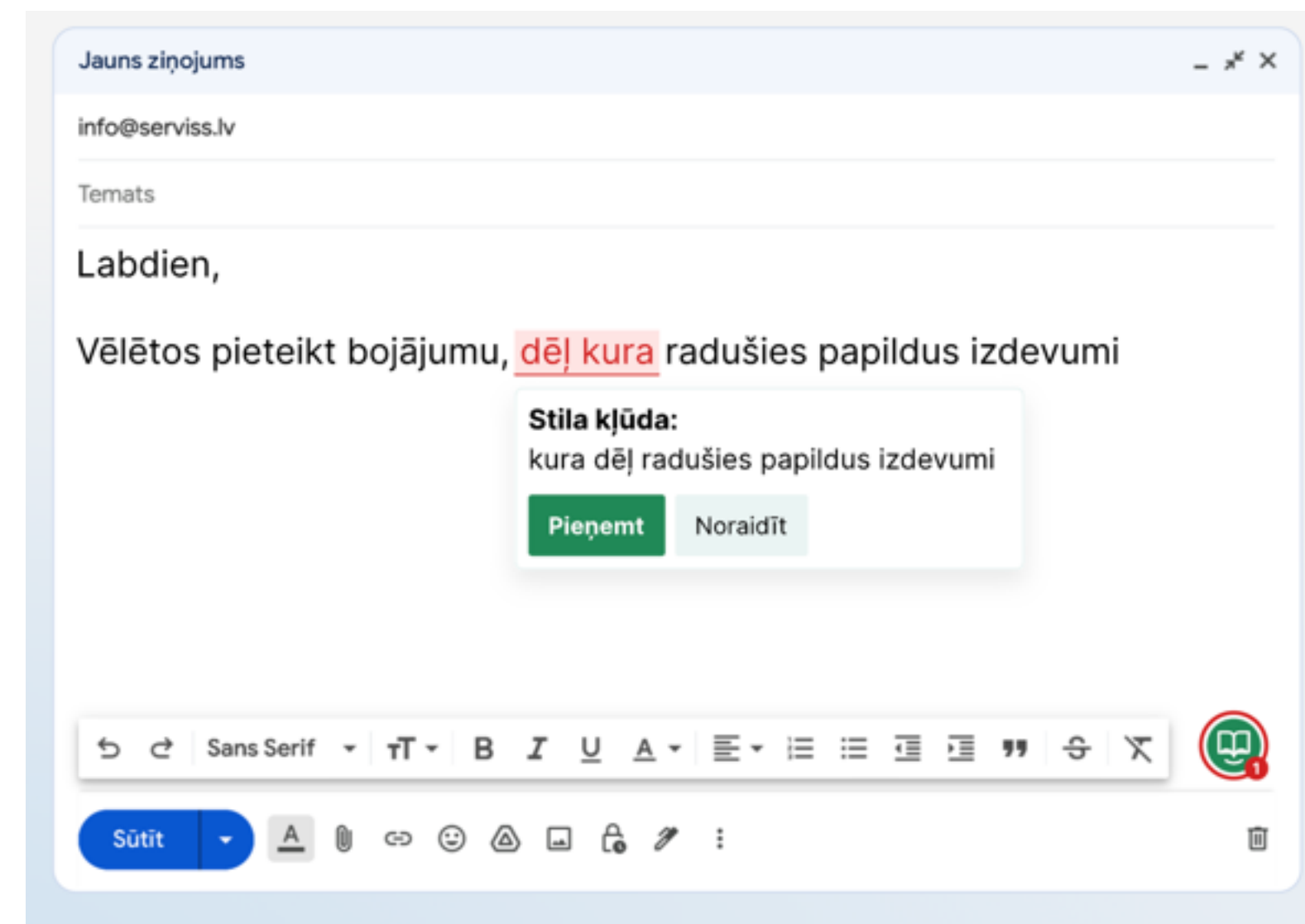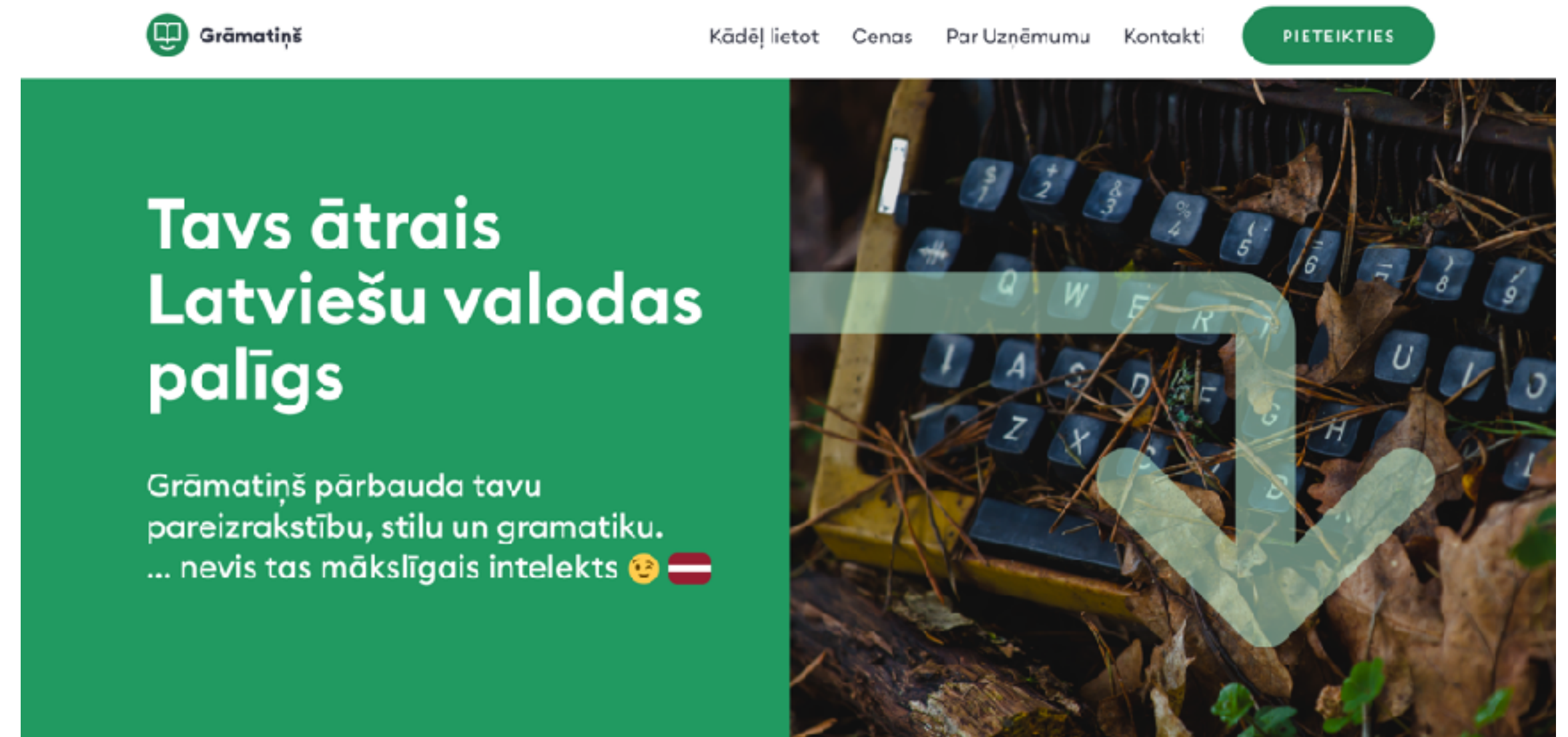
Project #11 – "Grāmatiņš", Grammarly for Baltic languages

Over 60k users, featured as Apple "App of the day" in many countries. Paid subscription business model. Market potential 5-8m EUR. Then focusing on other smaller languages in eastern Europe and Africa.

https://salieckomatus.lv

Product #12 – Contact-centre automation

What technology achieves:

- Reduce need for call-centre managers
- Monitoring and analyzing audio recordings of sales force
- Improving the effectiveness of verbal communications
- Training and performance evaluation of sales personnel
- Motivation for reaching KPIs