



Transport Recognition



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Customer NEEDS

- Detecting vehicles in the work area
- Vehicle tracking
- Tracking events such as vehicle entry/exit/downtime
- Labeled data from the customer's cameras

Solution.

AI in transport recognition

Choose a model

YOLOv8 provides the best interaction interface

Annotate data

We gathered 900 learning samples and annotated them by hand

Finetune the model

Train model on annotated data to achieve better performance

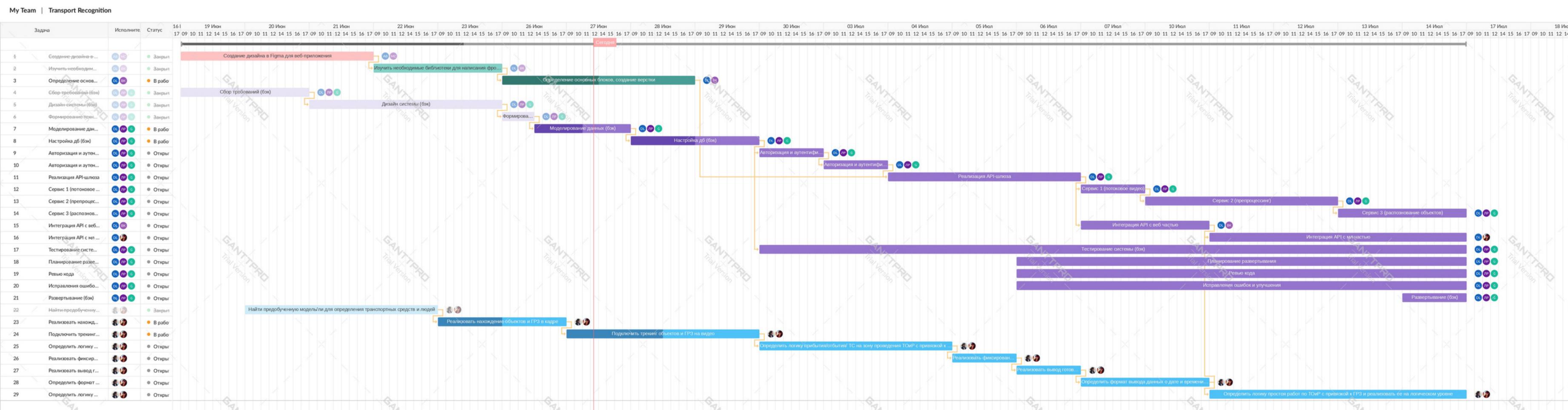
Postprocessing

Implemented technique to detect actions of trackable objects in a zone of interest

FIRSTLY

Diagram & tech stack

- Python
 - Figma
 - TypeScript
 - React
 - HTML/CSS
 - Flask
 - SQLAlchemy
 - JavaScript
 - Redux
 - OpenCV
 - Ultralytics





Закреплённое сообщение

Распределение ролей в команде: Журавлева Дарья — тимлид, мл-инженер Сапухина Мария

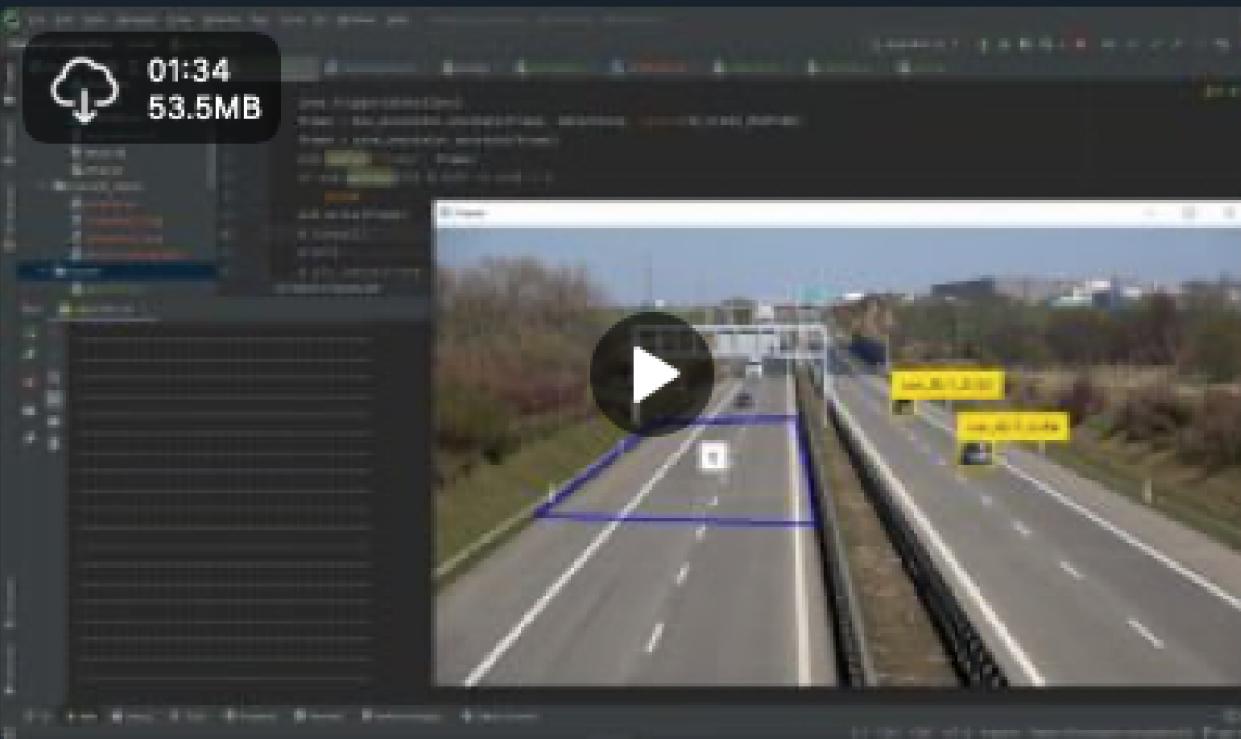


Darya Zhuravleva

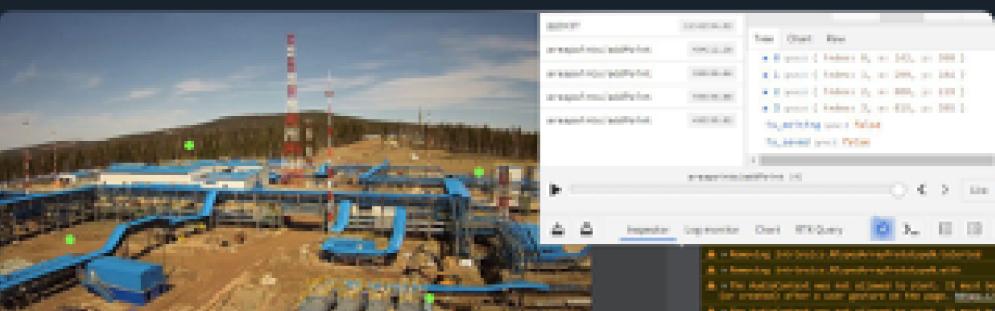
Здравствуйте! Mark, прошу написать сюда обратную связь по поводу наших у
Сообщением ниже пришлю материалы

Darya Zhuravleva

Дизайн: <https://www.figma.com/file/3BgMtyElg1OIJP7DrWHBoL/GazStroyProm-2?type=design&node-id=1%3A1>
Дизайн



Детекция и трекинг + определение нахождения внутри
зоны (мл часть только)



Фронтенд: сделали выделение зоны по
точкам

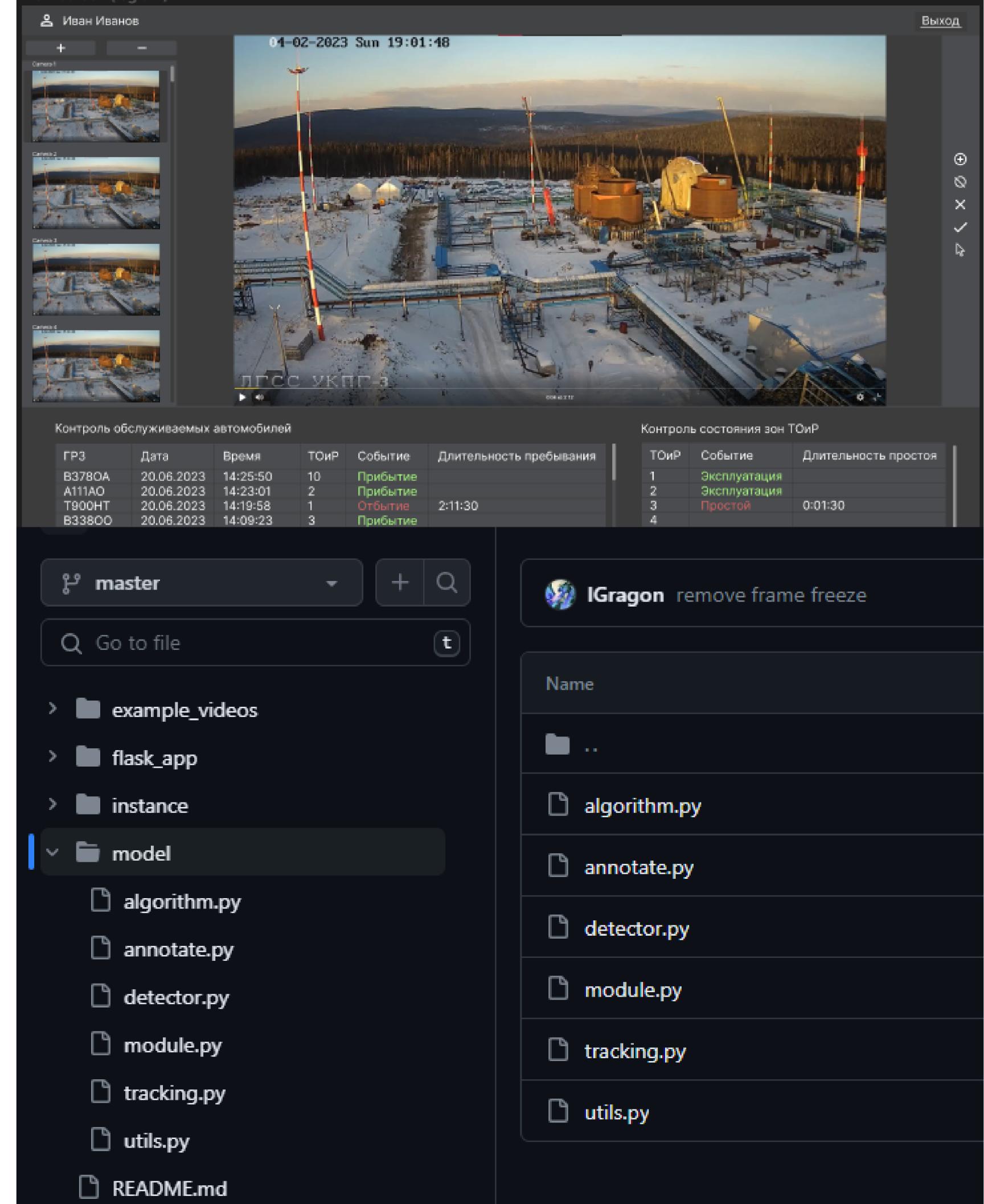
03 июля

Meeting with customer

- Everyday
- Track progress
- Feedback & task edits
- Instant changes
- Q&A
- Advising

Implementation

- Design in Figma
- Web page
- Backend
 - Video streaming
 - Postprocessing (points, events)
- ML
 - Model
 - Dataset



Result

- GitHub & Dataset - private
- Figma:



Opportunities



- Control of work performance in the zone
- Safety control on location
- Automation of processes on the production site
- Vehicle tracking and event recovery



WEWANTMONEY

Thank You