Vision, Optimization and Learning Group
Institute of Computer Graphics and Vision (ICG)
*Graz University of Technology*

Tracking aided object labeling tool for video data

Student Project / Bachelor's Thesis

Objective

In order to perform supervised deep learning training data is needed. In an ongoing research project moving objects with huge scale changes (very far, very near) shall be detected as early as possible. The objective of this student project is to create a tool to aid the process of data labeling for validation purposes. In the simple scenario a user draws a bounding box around an object of interest and the tool tracks it through time until the user applies corrections to the (non perfect) tracking. This can and shall be extended with various

tweaks like trajectory prediction, time reversal (big objects becoming smaller as they move away again), object proposals,... Depending on the experience of the student various concepts of computer vision can be tried out on real examples.
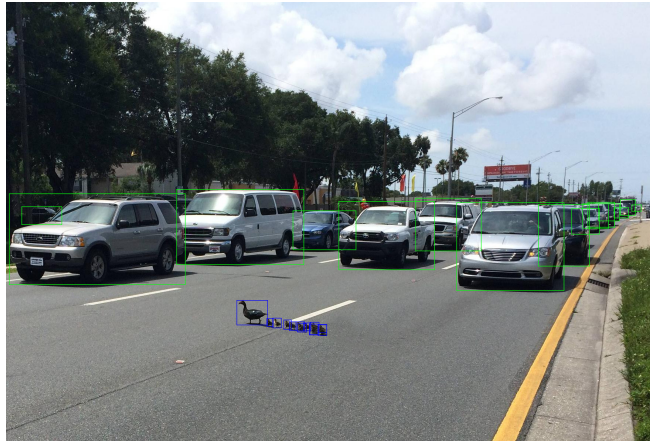
What we want

- Student of Biomedical Engineering, Information and Computer Engineering, Computer Science or Software Engineering and Management
- Basic knowledge in computer vision and optimization
- Curiosity for computer vision and eager to try out various CV concepts on real data.
- Basic knowledge in C++, Python and or Matlab
- Basic knowledge of a GUI framework like Qt, PyQt is a plus

What we offer

- Gain hands-on experience with a broad range of Computer Vision topics
- Opportunity to be creative and experiment with different approaches
- Work amongst a team of researchers

Contact

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