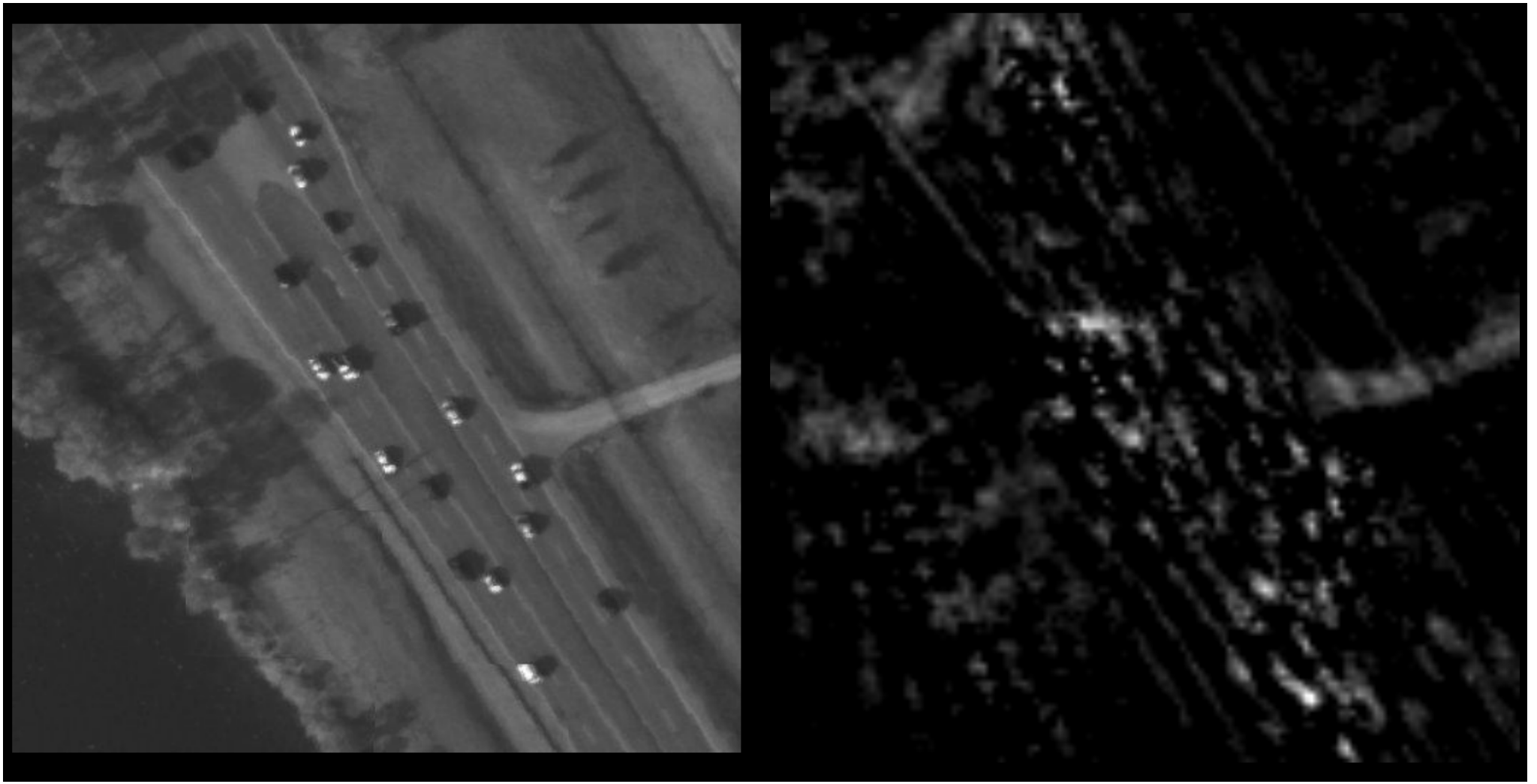
Moving Object Detection with Deep Convolutional Networks and LSTM

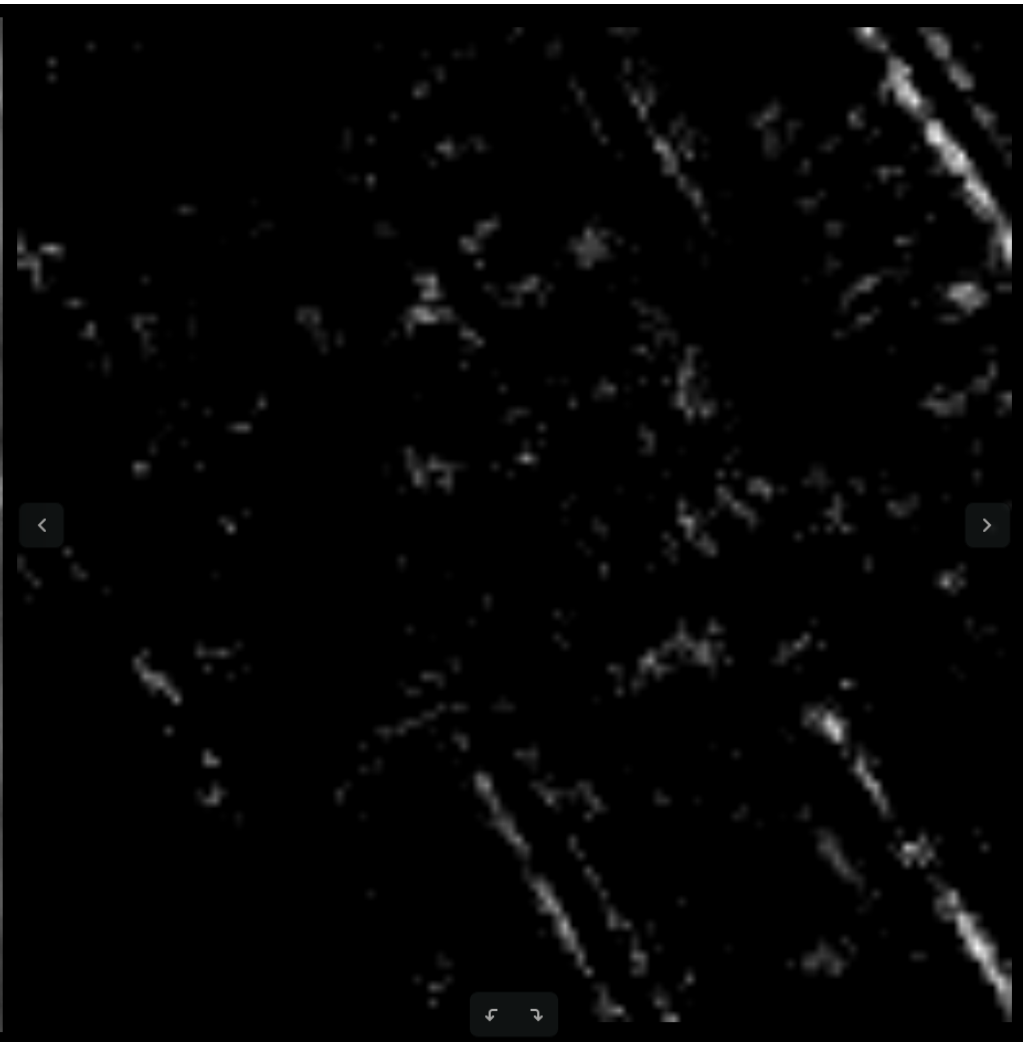
Gregoire Robinson
Advisors: Dong Zhang and Dr. Mubarak Shah

Last Week's Results



Last Week’s Results

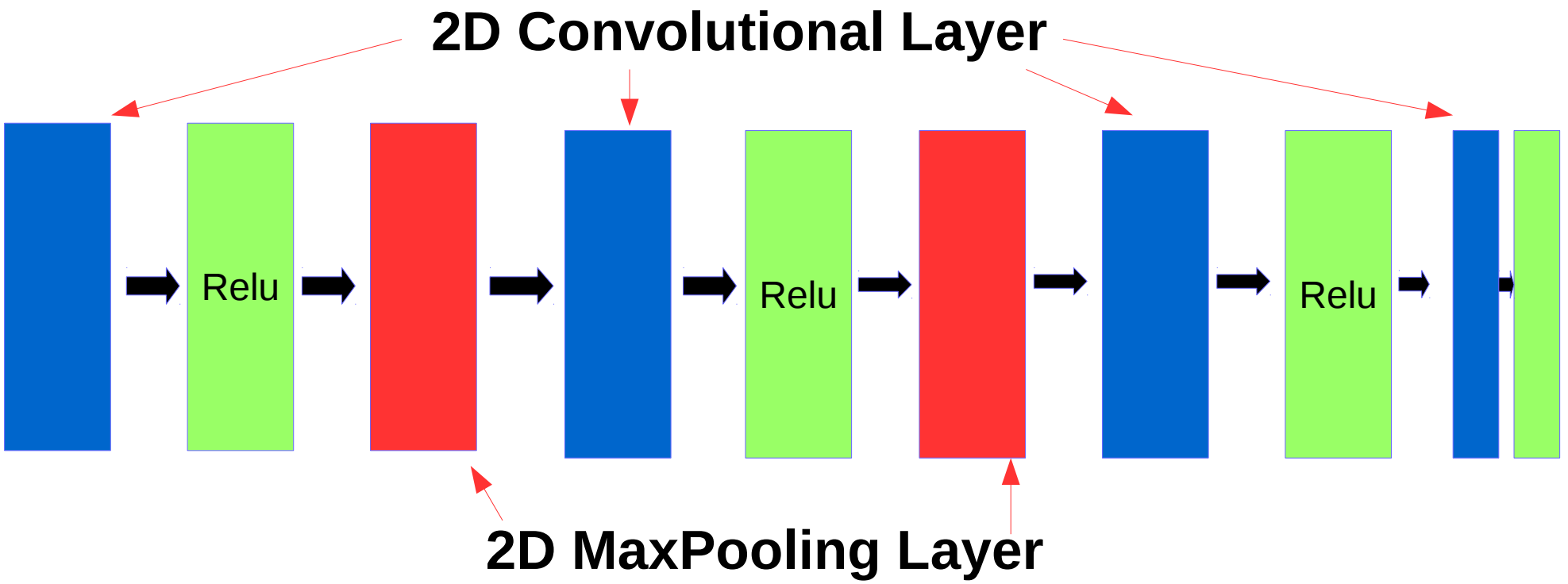




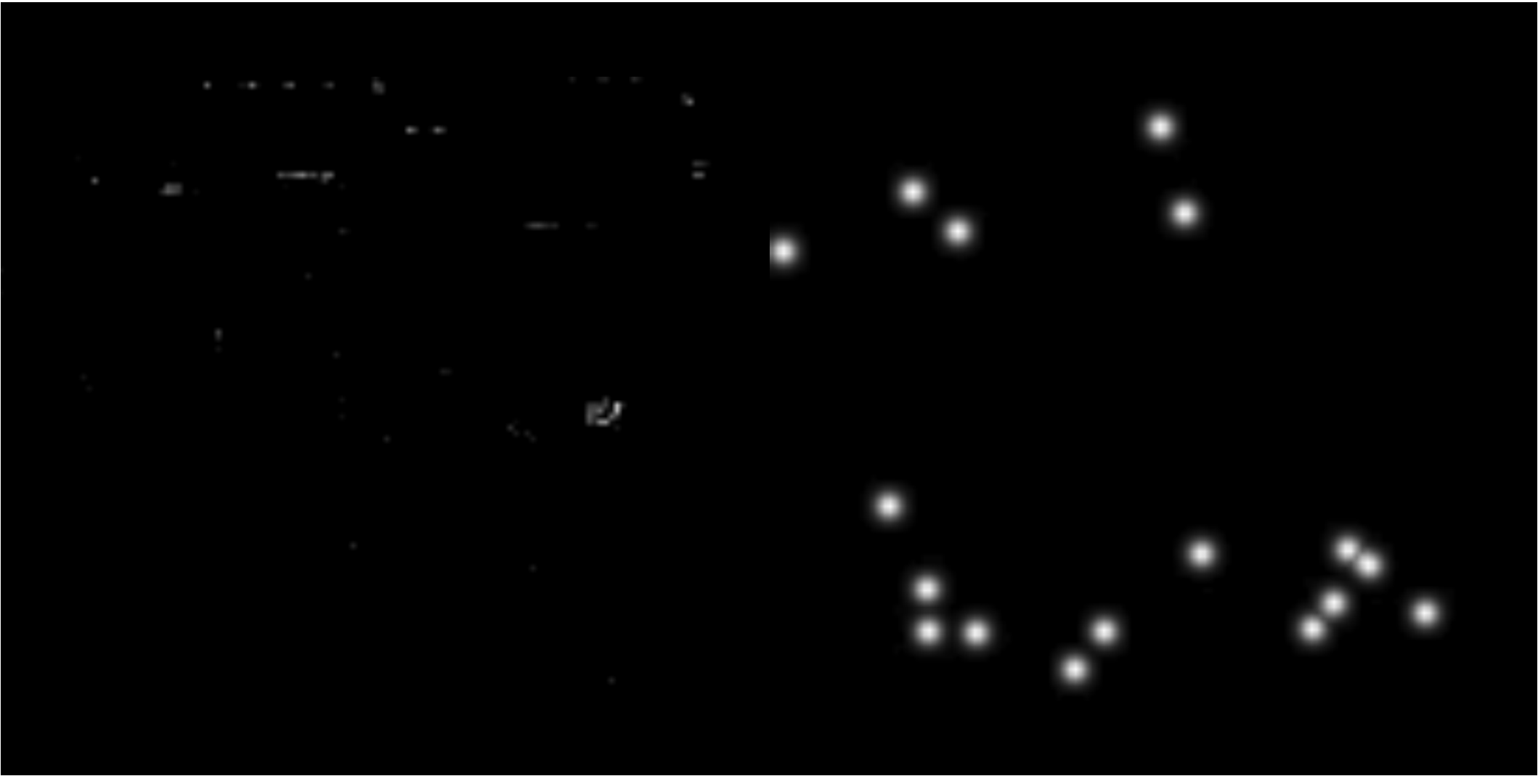
This Week...

- Modified neural network: Added an output layer
- Used PVLabs dataset: Images are already registered, better annotations, slightly larger vehicles
- Used frame-differencing: Instead of training network 1 image at a time, changed input to 5 consecutive frames
- Reduced training time significantly

Added Output Layer



Experiment 1: Batch Size 1



Experiment 2: Batch Size 16



Conclusions

- Started training Wednesday, there was an error in the data organization
- Good news is that training time is now >100 times lower so should be able to run more experiments

Future Work

- Train for more iterations
- Use background subtraction