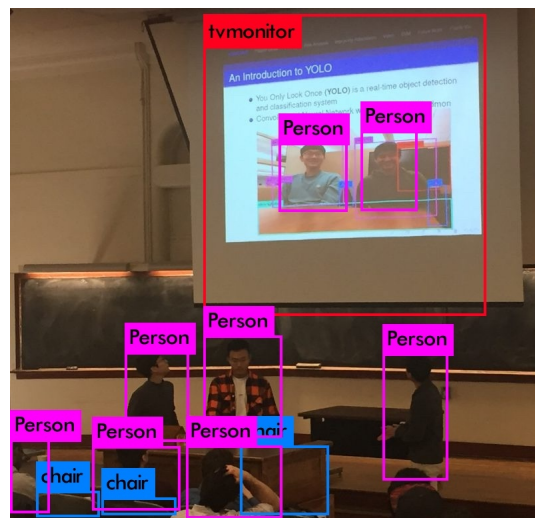
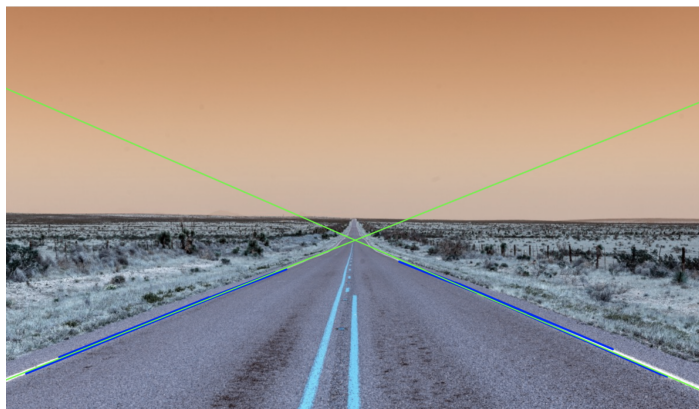


**Faculty Mentor: Richard Sowers (Math, ISE)**

**Team Leaders: Daniel Carmody and Kyle Begovich**

**Scholars: Eric Shen, Felipe Arias, Pengyu Cheng, Wei Liu, Dongjun Seung, Russell Ang, and George Aleksandrovich**

In our second year in the project, we decided to set out on contextualizing live video detections in the scope of urban risk. Today, integrating cameras into a vehicle or traffic system is easier than ever, and we would like to evaluate and extrapolate from that vast amount of data. For example, emphasizing detections that are in the path of travel of the vehicle the camera is mounted on along with beginning lane line detection.



Building on the previous semester's work, we are increasing the robustness of the detections by implementing both regression over previous frames and training a support vector machine. This informs the current detection confidences with the presupposition that objects persist and remain in the same vicinity, and the SVM works to partition objects with a hyperplane to better differentiate their detections.