

Camera Calibration and 2D-3D Mapping for Safer Traffic and Saving Lives and Stuff

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Data driven traffic safety research has previously been difficult due to a lack of an efficient way of collecting large amounts of accurate, non-biased 3D road user statistics. Computer Vision is a promising approach for solving this problem. This seminar will explore how camera calibration and 2D-3D mapping techniques help make that a reality. We'll discuss how bundle adjustment, ground plane modelling, Kalman Filters and Convolutional Neural Networks can be used for these purposes.