Project 2: Road Segmentation

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***Abstract*—**

I. Introduction

bla bla (Pascal)

A. Data

General description of images 100 images + gt -¿not enough to train and avoid overfitting + rotation to have roads in every direction (5, 10,...355 degrees) from image to linear vector patchs + moyenne/variance + hog (do sqrt with hitogram -¿ see kiko) gt to label (25% -¿ 191) neural nets -¿ resize to 224x224

Training vs Validation = 80/20 (Gael)

II. Methodology

1. BER (pascal) 2. feats = mean + var / patch + hog method = logistic reg + sqrt ? (pascal)

3. NN -¿ segnet, segnet connected, segnet connected gate graph with epochs -¿ loss vs epoch (Gael)

III. Results

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IV. Discussion

V. Summary

In this work we have shown that one can have a fairly good prediction using simple machine learning techniques like the least squares regression and the ridge regularization as long as one takes care of handling the data properly. We have also highlighted the fact that in the field of machine learning, one should be careful and that some intuition that seem good a priori yield worse prediction.