## DEPARTMENT OF COMPUTING

#### IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE

# example

## example description

Author: Anton Zhitomirsky

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#### 1 ReadMe

For main things mentioned about CNN go to deep-learning/Notes/L01/lecture.pdf

#### 2 Quiz

- 2.1 Your model performs well on the training data but the validation error is high. This might indicate:
  - · High bias
  - High variance
- 2.2 In which case might acquiring more training data help
  - · High bias
  - High variance
- 2.3 How can we potentially fix high bias?
  - · Add features
  - · Remove features
- 2.4 How can we potentially fix high variance
  - Increase regularization
  - Decrease regularization
- 2.5 Logistic regression is a
  - Linear model
  - Non-linear model
- 2.6 L1 regularization favours
  - Small coefficients
  - Few non-zero coefficients
- 2.7 How many paraeters does a logistic regression model have where raw pixel values are used as input features fro images fo size  $16 \times 16$  pixels?

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- 2.8 Convolutional filters are translation
  - Invariant
  - Equivariant