Shape Recognition Example
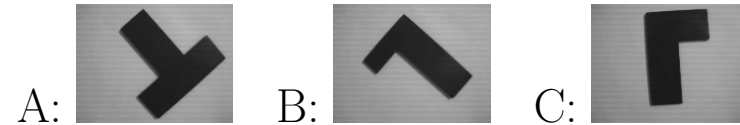
Robert B. Fisher

School of Informatics

University of Edinburgh

Flat Shape Recognition Example

A: B: C:

4 instances of each

a priori probability $= 0.33$

Example Training

For the batch-mode training used here, can merge Training and Validation sets.

We have 4 samples per class for training

Can use at most 3 properties.

Training Log

```
doall(2)
Model file name (filename)
?blocks
Number of classes (int)
?3
Training image file stem (filestem)
?TESTDATA1/f
Number of training images (int)
?12
Train image 1 true class (1..3)
?1
***
```

Recognition Performance

Confusion matrix:

Computed Class

	A	B	C
A	4	0	0
B	0	3	1
C	0	0	4

True Class

One class B part was flipped over: properties different

Slide based on: Bob Fisher

Lecture Overview

- Bayes Classifier: a simple process but well founded

- Works well because reliable feature extraction and features easily discriminate these simple classes

- Choosing good features is hard and problem specific

Slide based on: Bob Fisher