

## 02502 Image Analysis Exam - Answer Summary

1. Kidney perimeter filter: Minimum area = (requires DICOM)
2. DICE score (kidney segmentation): Between 0.95 and 1.00
3. Kidney area in cm<sup>2</sup>: (skipped)
4. Kidney median HU value: (skipped)
5. Traffic scatter plot: Visualized and matched
6. Afternoon traffic misclassified as morning: Between 5 and 10
7. Rainy mornings: Between 65 and 75
8. Ski slope system components: Background subtraction + motion detection
9. PCA variance (screws): 3 components explain  $\geq 44\%$
10. Most similar screws: screws\_012.jpg and screws\_016.jpg
11. Min/max 1st PCA component: screws\_015.jpg and screws\_005.jpg
12. Distance (screws\_007 vs screws\_008): Between 0 and 5000
13. PCA plot with screws\_007.jpg: Displayed
14. Gradient descent iterations: 3
15. Cell count in each image: Between 10 and 15
16. Landmark distance: Between 6 and 8
17. Missed cells (FN): Between 2 and 5
18. Dice ROI classification: C, D and E
19. Parametric threshold (D vs E): Between 155 and 165
20. PCA positive prediction count: Between 345 and 355
21. PCA-based classifier accuracy: Between 0.90 and 1.00
22. Mean PCA values: -2.21 and 3.71
23. PCA scatter plot: Displayed
24. Breast cancer dataset dimensions: Features = 30, Observations = 569