# 760 Assignment 1: Case-Based Reasoning

**Worth 20%**

## Due: Sunday 11th Sept 2016 23:59

## Brief

**Implement a case-based reasoner in a programming language or environment of your choice. Use the "travel case-base" to demo and test your system.**
**http://www.cs.auckland.ac.nz/~ian/CBR/travel_case_base.zip**

**Write a report describing your system, your design decisions and how to install and run your system. Submit this document with your commented program code and compiled executable (if appropriate). You will be shown a previous report that achieved full-marks during the lectures.**

### Restrictions:

**You may NOT use any open source CBR tools (such as jColibri or myCBR) or commercially available CBR software for this assignment.**

### Tips:

**This brief is deliberately vague to give you total freedom in how you implement this.**
**You'll probably want to create a simple k-nearest neighbour algorithm – Weka contains one called "IBL" (instance-based learner), so you could "adapt" this, but most students in the past have found it easier to start from scratch. Of course you don't have to use a k-NN algorithm, other forms of case retrieval are possible.**

**The PowerPoint "How to build a CBR system" gives you a step-by-step guide to implementing a simple CBR system.**

**Submit your assignment (code, executable and report) in a single .zip file to the UoA Assignment Drop Box**
**https://adb.auckland.ac.nz/Home/Login?ReturnUrl=%2f**

**Dept. Policy on Cheating in Assignments**
**http://www.cs.auckland.ac.nz/CheatingPolicy.php**

## Marking Guide *(out of 20 marks)*

**Case retrieval algorithm 4 marks**
**Local similarity metrics 5 marks**
**Extra features (e.g., adaptation, diversity, customizable similarity metrics) 2 marks**
**Interface 2 marks**
**Report 7 marks (note: this is worth over 40% of the assignment mark and should therefore take over 40% of your effort)**