EpochX Project Proposals

For final year Computer Science or MSc students.

## Project 1

**Project title:** Extensions to the EpochX genetic programming framework.  
**Description:**   
EpochX is a Java framework for performing genetic programming. This project involves the extension of the framework to provide new features that may include designing a GUI, distributing execution so it can run over multiple connected computers or implementing a module for producing graphical output. The group will require strong Java programming skills.

**Degree of difficulty:** Flexible   
**Group size:** 3-6  
**Any special resources:** none

## Project 2

**Project title:** Application of the EpochX genetic programming framework.  
**Description:**   
EpochX is a Java framework for performing genetic programming. Genetic programming is a technique for automatically generating programs to solve problems. The aim of this project would be to use the EpochX framework to evolve a solution to a well defined problem. This problem could be something like controlling a robot, data mining or controlling Mario for an entry for the Mario AI championship.

**Degree of difficulty:**   
**Group size:** 3-5  
**Any special resources:** none