Final Year Project Proposal

A machine learning approach to estimating signal delay caused by gravitational lensing

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Project details

This project will use techniques [2] [1]

Approach

Timetable

	2012					2013			
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Preparation	▨	▨							
Inspection Week					◆				
Presentation Week								◆	

Hardware & software

It is intended that the C programming language be used as the main language for the project, but this is yet to be decided. Other languages in consideration include Haskell, C++ and Python. If the need arises, Matlab may also be used, but it would be preferential to complete the project without its use. There will likely be no hardware requirements for this project other than a system which can run the finished code.

References

[1] Juan C. Cuevas-Tello, Peter Tino, and Somak Raychaudhury. "How accurate are the time delay estimates in gravitational lensing?" In: *Astronomy & Astrophysics* (2006).

[2] Juan C. Cuevas-Tello et al. "Uncovering delayed patterns in noisy and irregularly sampled time series: An astronomy application". In: *Pattern Recognition* (2009).