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**Rapid detection and identification  
of contamination within fish  
products using rapid ionisation  
evaporative mass spectrometry**

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**Abstract**

This document gives some ideas about how to write a project proposal, and provides a template for a proposal. You should discuss your proposal with your supervisor.



## 1. Introduction

In this section you should include a very brief introduction to the problem to the problem and the project.

Your project proposal should cover the following points:

- the engineering problem that you are going to solve;
- how you plan to solve your problem;
- how you intend to evaluate your solution; and
- any resource requirements for your project such as software, hardware or other resources that will be needed in the course of the project.

Your proposal should be not more than than 3 pages long.

## 2. Literature Review

In this section you should give a brief description of the problem itself. You want to briefly explain the problem, why it is important to solve the problem and define your project aims. After reading this section, the reader should understand why it is a problem, believe that it is important to solve and have a clear idea of the aims of your project.

When describing the aims of the project, you should avoid vague, unmeasurable words like 'analyse', 'investigate', 'describe', and use specific, measurable words like 'implement', 'demonstrate', 'show', 'prove'.

For example:

**Good** The aim of this project is to implement and evaluate a management system for network switches;

is much better than:

**Bad** The aim of this project is to investigate management systems for network switches.

In the second case there is no idea of how much work is involved, and you will never know whether you have finished. You and your supervisor (and the markers of your project) may have very different ideas about what such an 'investigation' involves. Of course, it is possible that the task you set yourself is not achievable, but if you are clear from the outset this is less likely, and will more easily be corrected.

## 3. Preliminary Work

- CNN for gas chromatography
- Multi-tree GP Wrapper-based Feature Construction for Gas Chromatography
- Multi-tree GP winner-takes-all classifier for gas chromatography.

#### **4. Contributions**

#### **5. Milestones**

#### **6. Thesis Outline**

#### **7. Resources**

In this section you will detail any resource requirements such as hardware, software or access to subjects.