# ASYNCHRONOUS GRAPH PROGRAMMING COMPILER PROPOSAL

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# Contents

# Chapter 1

# Introduction

Give an introduction to your project. This might include:

- Motivation for your project
- Problem you are trying to solve
- Scope of your project
- Organization of your report

You should tune this appropriately for what best suits your project.

# Chapter 2

# The Engineering Project

## 2.1 Health and Safety

Using the Health and Safety Guide posted on the course webpage, students will use this section to explain how they addressed the issues of safety and health in the system that they built for their project.

## 2.2 Engineering Professionalism

Using their course experience of ECOR 4995 Professional Practice, students should demonstrate how their professional responsibilities were met by the goals of their project and/or during the performance of their project.

## 2.3 Project Management

One of the goals of the engineering project is real experience in working on a long-term team project. Students should explain what project management techniques or processes were used to coordinate, manage and perform their project.

## 2.4 Individual Contributions

This section should carefully itemize the individual contributions of each team member. Project contributions should identify which components of work were done by each individual. Report contributions should list the author of each major section of this report.

### 2.4.1 Project Contributions

Give the individual contributions of the each team member towards the project.

### 2.4.2 Report Contributions

Give the individual contributions of the each team member towards writing the final report.

# Chapter 3

# Background Literature Review

## 3.1 A Few LaTeX Examples

You can reference great written works like this [1] or others like this [2].

## 3.2 Mathematical Equations

Simple equations, like $x^y$ or $x_n = \sqrt{a+b}$ can be typeset right in the text line by enclosing them in a pair of single dollar sign symbols. Don't forget that if you want a real dollar sign in your text, like $2000, you have to use the `\$` command.

An example equation is

$$A = B \tag{1}$$

This was equation (1).

A more complicated equation should be typeset in *displayed math* mode, like this:

$$z \left( 1 \ + \ \sqrt{\omega_{i+1} + \zeta - \frac{x+1}{\Theta + 1} y + 1} \right) \quad = \quad 1$$

The "equation" environment displays your equations, and automatically numbers them consecutively within your document, like this:

$$\left[ \mathbf{X} + \mathrm{a} \ \geq \ \hat{\underline{a}} \sum_{i}^{N} \lim_{x \to k} \delta C \right] \tag{2}$$

Other environments exist, like the "align" environment. For instance, the *unitary* Fourier transform pair is given as

$$X(j\Omega) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\infty} x(t) e^{-j\Omega t} dt \tag{3}$$

$$x(t) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\infty} X(j\Omega) e^{j\Omega t} d\Omega \tag{4}$$

Here is a matrix:

$$\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$$

Possible useful text environments could include the following.

**Lemma 3.2.1.** *This is a lemma.*

**Theorem 3.2.2.** *This is a theorem.*

*Proof.* This is the proof of Theorem 3.2.2. □

**Definition 3.2.3.** This is a definition.

*Notation.* This is some notation.

## 3.3 Example Figure

An example figure grabbed from the Carleton University webpage (`http://www.carleton.ca`) is shown in Fig. 1.


Figure 1: Carleton University logo.

# Chapter 4

# Conclusions

I conclude that my project is awesome. Hey look at this table.

| $k$ | $x_1^k$ | $x_2^k$ | $x_3^k$ | remarks |
|---|---|---|---|---|
| 0 | -0.3 | 0.6 | 0.7 | |
| 1 | 0.47102965 | 0.04883157 | -0.53345964 | * |
| 2 | 0.49988691 | 0.00228830 | -0.52246185 | $s_3$ |
| 3 | 0.49999976 | 0.00005380 | -0.52365600 | |
| 4 | 0.5 | 0.00000307 | -0.52359743 | $\epsilon < 10^{-5}$ |
| 7 | 0.5 | 0 | -0.52359878 | $\epsilon < \xi$ |

Table 1: This is a great table.

Isn't Table 1 really nice? This next one is nice too.

| | Singular | | Plural | |
|---|---|---|---|---|
| | English | **Gaeilge** | English | **Gaeilge** |
| 1st Person | at me | **agam** | at us | **againn** |
| 2nd Person | at you | **agat** | at you | **agaibh** |
| 3rd Person | at him | **aige** | at them | **acu** |
| | at her | **aici** | | |

Table 2: Another nice table.

# References

[1] T. Me and R. You, "A great result," *Wonderful Journal*, vol. 5, no. 9, pp. 1–11, 1998.

[2] J. Him and K. Her, "An even better result that you won't believe," *Best Journal Ever*, vol. 4, no. 8, pp. 55–66, 2002.