

Co-Map Modeling

Arthur Little Micheal Kelly

February 14, 2010

Abstract

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vivamus ut quam vel ipsum porta congue ac sit amet urna. Fusce non purus sit amet sem placerat ultrices. Nulla facilisi. Morbi quis orci erat, a tincidunt sapien. Phasellus gravida tristique bibendum. Maecenas ac felis at felis lobortis cursus. Proin lobortis tristique est, rutrum scelerisque lacus aliquet quis. Fusce risus urna, rhoncus at placerat nec, laoreet ac est. Duis molestie congue erat id pretium. Nulla facilisi.

Don't make the abstract or summary too long. Oh, also re-read the instructions on exactly what should be in the summary and if they want an abstract.

Contents

1	Introduction	3
1.1	Background	3
1.1.1	What other people have done	3
1.1.2	Motivation	3
1.2	Our Approach	3
1.3	Goals	3
2	Assumptions and Terminology	4
3	The Model	4
3.1	Notation	4
3.2	Construction	4
3.2.1	Building off of other people's work	4
3.3	Modifications and Improvements	4
3.4	Special Cases	4
3.4.1	Assume that the dog is larger than the hole	4
3.4.2	Assume that the hole is black	4
3.4.3	Assume that the hole is whole	4
4	Results, by any other name	5
4.1	What happened when the dog found the treat first	5
4.2	What happened when the fan was on high speed	5
5	Discussion and/or Conclusions	5
5.1	B.T.W.	5
6	References	5

1 Introduction

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut lobortis, urna eu gravida tincidunt, dolor sem tempor leo, sed rutrum lorem magna ut quam. Mauris malesuada ipsum in nulla accumsan mollis ullamcorper tellus facilisis.

- The use of bulleted lists can help condense material
- Bulleted lists are easy to read and draw the attention of the reader
- Somehow it always looks good to have at least three, but I am not sure why
- Don't have too many.

1.1 Background

Vivamus porttitor, diam nec aliquam posuere, lorem nunc consectetur lorem, id rutrum sem justo at lorem. Cras eu purus nunc, luctus luctus risus. Nulla sem augue, malesuada et pulvinar at, rutrum quis orci. Vestibulum nisl ligula, congue nec sollicitudin id, elementum at turpis. Proin eget ante ut mi ullamcorper fermentum vitae suscipit sapien.

1.1.1 What other people have done

1.1.2 Motivation

Donec ut purus at ante molestie interdum. Aenean sit amet orci tincidunt nisl consectetur adipiscing.

1.2 Our Approach

Praesent diam leo, suscipit $\frac{x}{2} = 2$ sed dignissim sed, tempor ac sem. Maecenas vel vehicula eros. Nullam tincidunt vestibulum urna sed tempus. Vivamus accumsan, purus eget aliquet tincidunt, est nunc feugiat lectus, eleifend imperdiet sem nisi eget lacus. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos.

1.3 Goals

Vestibulum semper tempor mi, vitae fringilla elit dignissim vel. Donec porttitor, mauris vitae sagittis feugiat, turpis risus pellentesque tellus, non molestie orci mi vitae nisl. Phasellus id erat libero, in placerat orci. Vestibulum libero diam, tincidunt eu eleifend blandit, pellentesque in elit.

2 Assumptions and Terminology

Vivamus porttitor, diam nec aliquam posuere, lorem nunc consectetur lorem, id rutrum sem justo at lorem. Cras eu purus nunc, luctus luctus risus. Nulla sem augue, malesuada et pulvinar at, rutrum quis orci. Vestibulum nisl ligula, congue nec sollicitudin id, elementum at turpis. Proin eget ante ut mi ullamcorper fermentum vitae suscipit sapien.

3 The Model

3.1 Notation

Vivamus porttitor, diam nec aliquam posuere, lorem nunc consectetur lorem, id rutrum sem justo at lorem. Cras eu purus nunc, luctus luctus risus. Nulla sem augue, malesuada et pulvinar at, rutrum quis orci. Vestibulum nisl ligula, congue nec sollicitudin id, elementum at turpis. Proin eget ante ut mi ullamcorper fermentum vitae suscipit sapien.

3.2 Construction

3.2.1 Building off of other people's work

3.3 Modifications and Improvements

Where did you start, where did that take you, where did you end up

3.4 Special Cases

3.4.1 Assume that the dog is larger than the hole

3.4.2 Assume that the hole is black

Did you want some examples of math? To put some math in the same line, $\sin(x) + \frac{1}{2} \int_2^{23} x dx$ use single dollar signs. For their own line, use double

$$\text{nice words} = \int_0^{\infty} \frac{e^{-x^2}}{x} \sqrt[3]{45} \sqrt{3-x} dx$$

3.4.3 Assume that the hole is whole

Here are basic ideas you need for a matrix.

$$\begin{pmatrix} a & b & c \\ d & e & f \\ g & h & i \end{pmatrix}$$

You can also use this for a piecewise function,

$$f(x) = \begin{cases} x^2 - 3 & x < 0 \\ 3x - 5 & 0 \geq x < 5 \\ 2 & 5 \leq 5 \end{cases}$$

Notice that the right side has to have the closure, but I use the ”.” to make it invisible. I also put an extra place holder to give myself a bit more room.

Look online for other math ideas.

4 Results, by any other name

4.1 What happened when the dog found the treat first

4.2 What happened when the fan was on high speed

5 Discussion and/or Conclusions

How did it work? What would you do next? Why was this modeling effort such a success? What conclusions about the science can you draw from this?

5.1 B.T.W.

Remember to look at other successful papers to see what kinds of things they included. For example, <http://www.math.washington.edu/morrow/mcm/mcm.html>. Don't worry about putting links into the paper, but some subtle (really subtle) color could be nice or maybe some **bf bold faced text** here and there.

6 References

Don't forget this section. Over-reference rather than under-reference. One standard format is to number the references and refer to them in the text by the number,

4

, like this. Then number them the same way here (in numerical order, numbered as they appear in the text). Another way is to refer to the author's last name and the year in the text (Bauldry, 1942), (Bauldry and Ginn, 1958), (Bauldry et al, 1998). Note the difference between one author, two authors, and more than two authors. You can also list more than one by, (Bauldry 1952, Marland 2013). In this case, the references are listed alphabetically by the last name of the first author. See other papers for more guidance.