AN ODE TO WABI-SABI: HOMAGE TO A GREAT AND WONDERFUL PERSON

by Wabi-sabi Admirer

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Computing Boise State University December 2022

BOISE STATE UNIVERSITY GRADUATE COLLEGE

DEFENSE COMMITTEE AND FINAL READING APPROVALS

of the dissertation submitted by

Wabi-sabi Admirer

Dissertation Title: An Ode to Wabi-sabi: Homage to a Great and Wonderful Person

Date of Final Oral Examination: 1st December, 2022

The following individuals read and discussed the dissertation submitted by student Wabi-sabi Admirer, and they evaluated the presentation and response to questions during the final oral examination. They found that the student passed the final oral examination.

Wabi-sabi The Great, Ph.D. Chair, Supervisory Committee

Aaa, Ph.D. Member, Supervisory Committee

Bbb, Ph.D. Member, Supervisory Committee

The final reading approval of the dissertation was granted by Wabi-sabi The Great, Ph.D., Chair of the Supervisory Committee. The dissertation was approved by the Graduate College.

DEDICATION

dedicated to Wabi-sabi

ACKNOWLEDGMENTS

The author wishes to express gratitude to Wabi-sabi. This work would have been partially supported by some particular grant, if there was one.

AUTOBIOGRAPHICAL SKETCH

Wabi-sabi Admirer was born admiring Wabi-sabi. Wabi-sabi Admirer has been tinkering with admiration of Wabi-sabi for a long time. Now it is time to be blessed by Wabi-sabi.

ABSTRACT

An abstract is a brief summary of the document. A typical abstract provides a brief introduction, enough to provide context for the document, explains the purpose of the thesis or dissertation or project, and summarizes the major results and conclusions. Keep in mind that a casual observer is likely to judge the content of the document by the abstract and title alone. (There is an old adage: "in a joke, the punchline comes at the end; in a paper [or thesis], it comes in the abstract.") A single concise paragraph usually suffices for the abstract. If it spills onto a second page, it is probably too long.

Table of contents

List of Tables

List of Figures

Table of contents

Introduction {ch-intro}

What is this?

This is a template that allows you to typeset your dissertation (or thesis or project report) in the format approved by the Boise State Graduate College. It greatly reduces your typesetting work and helps you produce an aesthetically pleasing and consistent document. The template depends on a style class, titled bsu-cs.cls that was specifically designed for Boise State Computer Science students but would also work for students from other departments.

Where are the style class files?

Please consult the guide from Graduate College~(Graduate College 2021) for resolving any style issues that are not addressed by the style class files that are provided along with this document. The files associated with this style can be found on the GitHub website~(Jain 2025).

The file bsu-cs.cls contains the formatting directives for the bsu-cs style. It is based on the standard LaTeX report style with 12 point font option.

TO-DO: Update this list relevant to Quarto

- 1. Simply copy bsu-cs.cls to the directory containing your LATEX document.

 That way, LaTeX will find it, because it looks in current directory by default.
- 2. Upload the bsu-cs.cls file along with this template (and associated files) to Overleaf to use web-based LaTeX.
- 3. The current style class file may be installed in some directory available system wide. (Ask your systems administrator if this is the case). You will have to include that directory in the path LaTeX uses to search for input files. Under Linux, this is controlled by the TEXINPUTS environment variable, which can be set in the .bashrc file in your home directory. For example

TEXINPUTS=.:/usr/local/texinputs/:/usr/share/texmf// export TEXINPUTS

adds /usr/local/texinputs, a possible location for bsu-cs.cls, although it will not take effect until you source the .bashrc file, or log in again. 4. Install the style class files in a directory under your accounts and set the TEXINPUTS variable accordingly.

The first or second way is recommended, because they involve making a local copy of the style file. This assures your document format will not be affected affected by subsequent updates to bsu-cs.cls (but gives you the option to copy the updated file if you want).

Get ready for Wabi-sabi {sec-getReady}

So who is Wabi-sabi? We need a lot of text in here to see what happens when we hit the bottom of a page with text and try out things like footnotes ¹. So here is some

¹What's not to like about footnotes, anyway? Brian O'Nolan and George MacDonald Fraser both used them to great effect.

extra stuff: ²

stuff stuff

We need lots more stuff to get a full page of text, without a chapter or section heading, so we can check all the margins.

stuff stuff

²Too many footnotes, however, can be distracting.

stuff stuff

stuff stuff

The Greatness of Wabi-sabi {ch-wabisabiGreatness}

Previous work

The greatness of Wabi-sabi The Great derives from her early work as documented in her books~Great (1952).

What are their names?

Please consult the articles by Admirer~(Admirer 1970) and Admirer, Smith and Doe~(Admirer, Smith, and Doe 1972) for more details. Note that the references are cited by the last names of all authors for three authors or less. For more than three authors, "et al" can be used.

Check the References on page~?? for an example of how to format the references.

The code of Wabi-sabi

Thesis and dissertation text is normally "double spaced." It is customary to single-space literal code. Figure ?? shows a sample Java program.

```
/**
Compute x^n using recursive doubling technique. O(lg n) multiplications.
Oparam x The base value, unlimited precision.
@param n
         The exponent, an integer.
@return
          The computed power as a BigInteger
*/
public static BigInteger power(BigInteger x, int n)
{
    BigInteger temp = x;
    BigInteger result = BigInteger.ONE;
    while (n != 0) {
        if ((n \& 1) == 1)
            result = result.multiply(temp);
        if ((n = n >>>1) != 0)
            temp = temp.multiply(temp);
    }
    return result;
```

Figure 1: Repeated Squaring Power Method] {Repeated Squaring Power Method. This figure also serves as an example of the inclusion of literal code.

Other mysteries of Wabi-sabi

Here is an itemized list of all the mysteries of Wabi-sabi.

- Mystery 1.
- Mystery 2.
- Mystery 3.
- Mystery 4.

Here is a simple table.

Table 1: The Approximate Time of Parallelizing Each Code

Parallel library/language	WRS Code	OCS Code	ICSAMD Code
MPI	20 hours	2 weeks	1 month
HPF	3 hours	$1\ 1/2$ weeks	1 month

The not so great things about Wabi-sabi

Figures

Check **?@fig-fuzzyImage** for what happens when Wabi-sabi gets compiled. This example shows how to include an image (in PDF, JPG or PNG) into a Quarto document.

