

Master Project Report

# Teakwood: An Web Framework for Handling Many-task Computing

*Submitted in partial fulfillment of  
the requirements for the degree of*

**Master in System Science**  
in

Louisiana State University and Agricultural and Mechanical College  
The School of Electrical Engineering and Computer Science  
Computer Science and Engineering Division

by

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Under the guidance of  
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## Preface

Using Linux commands to handle computing jobs can be a hurdle to the scientific researchers who dont have HPC related background. Teakwood provides a solution and beyond. Teakwood is a framework that migrates all the terminal typing work to a web console GUI, and provides user a total control of their jobs, data, computing resources and so on just by clicking buttons. Teakwood is also an open platform that enables user to work co-operatively. Through Teakwood, user can share their models, results, and computing resources within their group and have discussion in Teakwood forum. Teakwood is powered by Django.

## **Abstract**

Using Linux commands to handle computing jobs can be a hurdle to the scientific researchers who don't have HPC related background. Teakwood provides a solution and beyond. Teakwood is a framework that migrates all the terminal typing work to a web console GUI, and provides user a total control of their jobs, data, computing resources and so on just by clicking buttons. Teakwood is also an open platform that enables user to work co-operatively. Through Teakwood, user can share their models, results, and computing resources within their group and have discussion in Teakwood forum. Teakwood is powered by Django.

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# Chapter 1

## Problem Definition

¡Problem Definition here¿

# Chapter 2

## Introduction

2.1 Motivation

2.2 Teakwood

2.3 Feature

# Chapter 3

## Teakwood System

### 3.1 Overview

### 3.2 Frontend

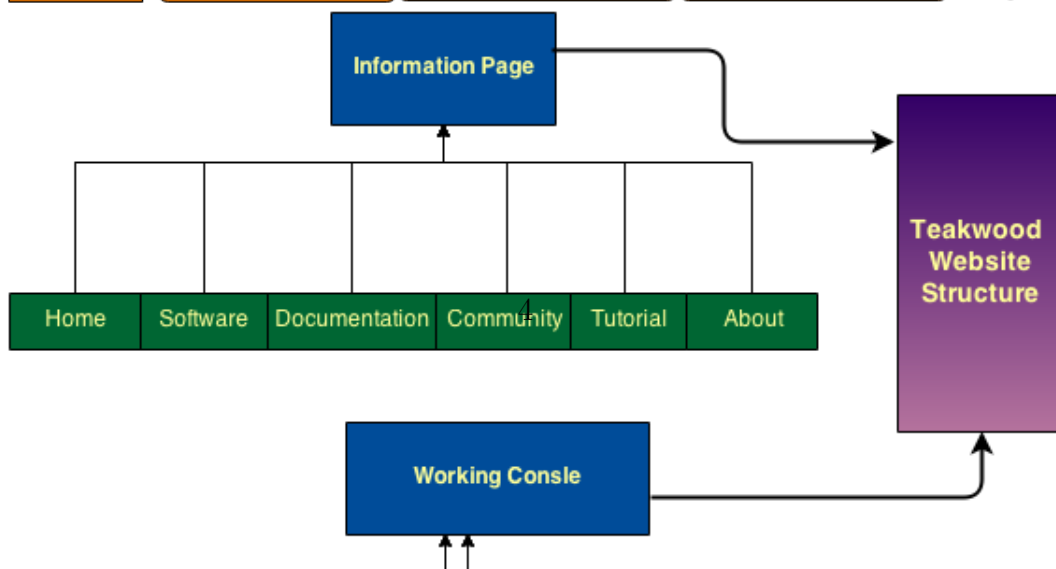
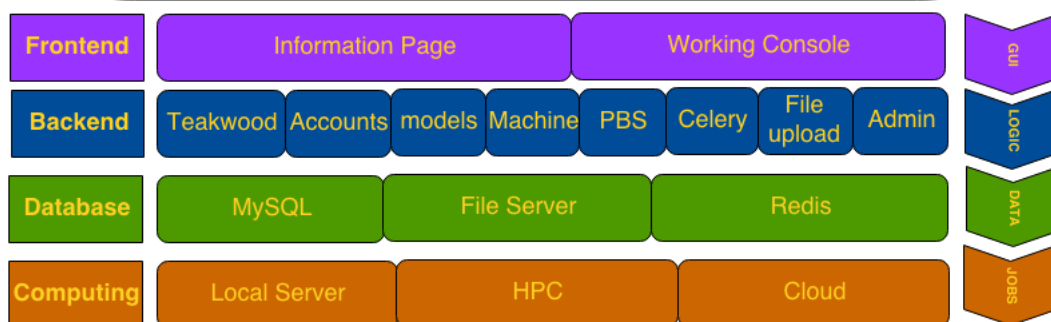
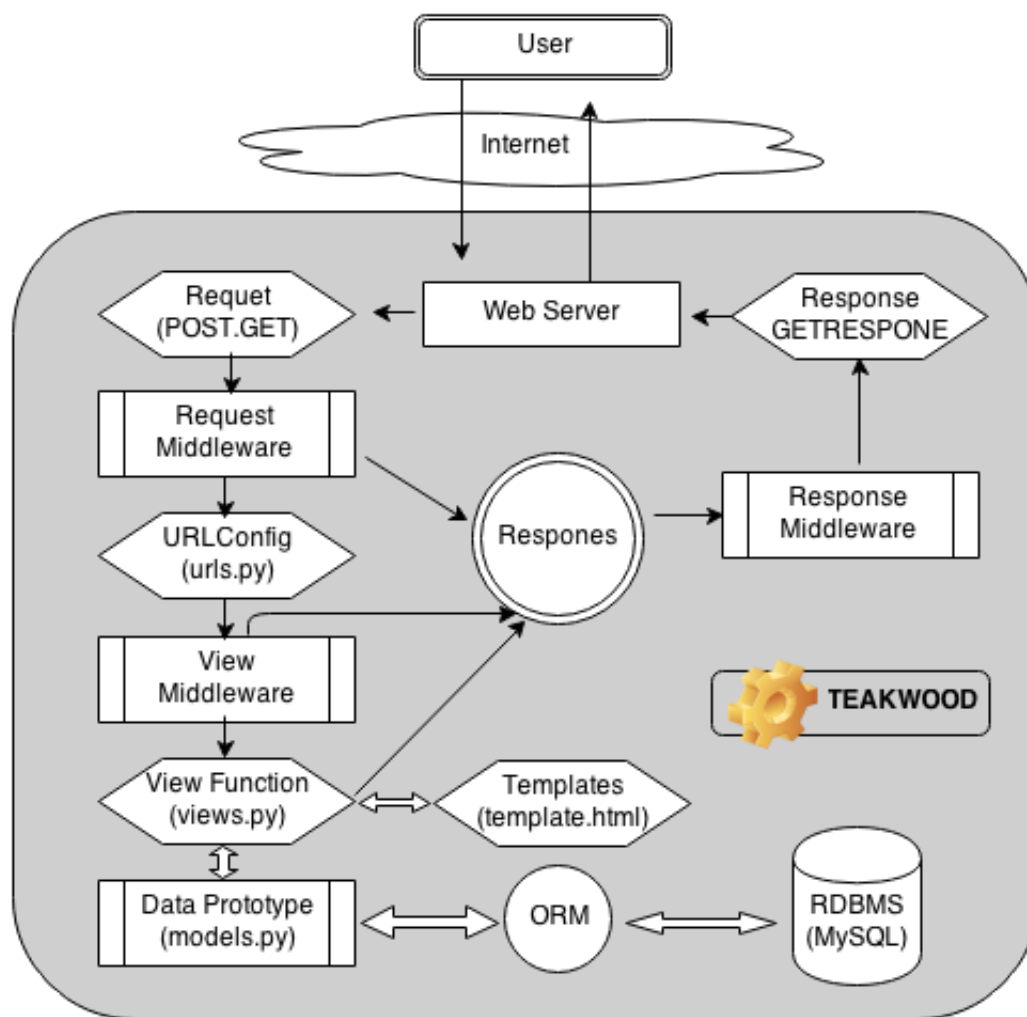
### 3.3 Backend

### 3.4 Data handling

### 3.5 Remote Configuration

Refer figure 3.1.





# Chapter 4

## Future Work

¡Future work here!

# Chapter 5

## Conclusion

¡Conclusion here!

# Acknowledgments

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National Institute of Technology Calicut

# References

- [1] ;Name of the reference here;, <urlhere>
- [2] ;Name of the reference here;, <urlhere>