

# RoboTractor

Jeremy Wright  
Arizona State University  
jlwrigh1@asu.edu

Arun Balaji Buduru  
Arizona State University  
abuduru@asu.edu

David Lucero  
Arizona State University  
dwlucero@asu.edu

**Abstract**—Here you need to describe the abstract of your project including (a) Problem statements, (b) project scope, (c) main tasks, and (d) schedule **\*CRITICAL: Do Not Use Symbols, Special Characters, or Math in Paper Title or Abstract. (Abstract)**

**Index Terms**—put indexing key words here that (key words)

## I. INTRODUCTION

In this section, describe:

- 1) The problems to be addressed in this project.
- 2) Why these problems are important?
- 3) Applied technologies and solutions to address these problems.
- 4) Expected outcomes of this projects.
- 5) Project management plan (timeline, and group members, etc.)

## II. SYSTEM MODELS

### A. System Model

Describe the system setup for this project (including propioriate diagram if needed).

### B. Software

Django [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11]

Describe needed software (applications, tools, APIs) to develop this project.

### C. Security Model (optional)

This section is needed if the project is focusing on security. Describe attack source, attack goal, attach methods, and attack consequences.

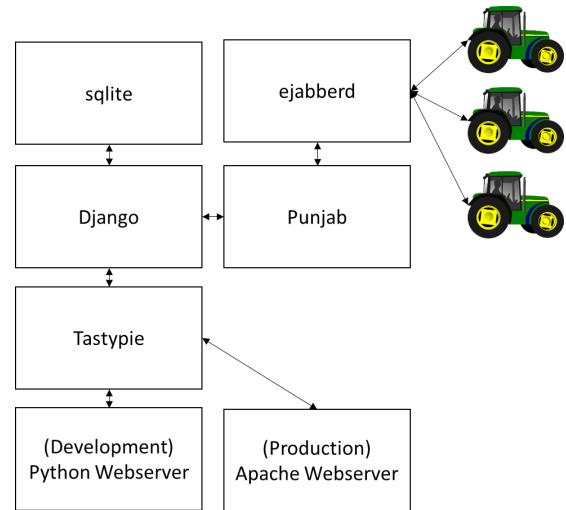


Fig. 1. Software Component Block Diagram

## III. PROJECT DESCRIPTION

Summarize the project description here.

### A. Project Overview

Describe how many project tasks are proposed and what their relations (dependency) in the project. Use diagram is needed. Provide midterm and final goals of this project.

### B. Task 1 : title..

Describe the proposed project task 1.

### C. Task 2: title..

Describe the proposed project task 2. ...

### D. Task k: title..

Describe the proposed project task k (if exists).

### E. Project Task Allocation

Describe the workload for the group members and their responsibility for the proposed tasks. Use table if possible to highlight the proposed workload and allocations. Use percentile to indicate the workload and identify the project lead of this project.

### F. Deliverables

Describe the expected outcomes of the projects: e.g., software packages, tools, algorithms, system designs, publishable materials (manuscripts, white papers, surveys, etc.).

### G. Project Timeline

Describe the roadmap of the project. Use Gantt Chart if possible to highlight the project roadmap based on the project tasks. Provide the timeline of midterm and final goals of this project.

## IV. RISK MANAGEMENT OF THE PROJECT

Describe (a) what potential issues may prevent this project from being successful, (b) what mitigation strategies to prevent/mitigate the identified issues. A good project design should consider what if a task fails. How likely (low, medium, high), the proposed tasks may fail. Are there alternates/makeup/get-around approaches available? Better use a table to highlight the risks and corresponding mitigation strategy.

## V. CONCLUSION

(a) summarize the project proposal, (b) Describe potential future work (or applications) that can be built based on the proposed work.

## VI. ACKNOWLEDGMENT

Put sponsor/mentor/assistance acknowledgments on developing this project proposal.

Reference is very important in your report. Please highlight where you have referred technical terms and solutions in the content. Following the IEEE citation format and provide a complete citation for each reference. The template will number citations consecutively within brackets [1]. The sentence punctuation follows the bracket [2]. Refer simply to the reference number, as in [3] do not use Ref. [3] or reference [3] except at the beginning of a sentence: Reference [3] was the first ... Here are a few examples. [12]

## REFERENCES

- [1] (). Django, GitHub, [Online]. Available: <https://github.com/django> (visited on 02/06/2014).
- [2] (). Toastdriven/django-tastypie, GitHub, [Online]. Available: <https://github.com/toastdriven/django-tastypie> (visited on 02/06/2014).
- [3] (). Seshat 0.3.1 : python package index, [Online]. Available: <https://pypi.python.org/pypi/Seshat/> (visited on 02/06/2014).
- [4] (). fritzy/SleekXMPP, GitHub, [Online]. Available: <https://github.com/fritzy/SleekXMPP> (visited on 02/06/2014).
- [5] elliando dias, "Django and xmpp bosh writing a real time web app," [Online]. Available: <http://www.slideshare.net/adorepump/django-and-xmpp-bosh-writing-a-real-time-web-app> (visited on 02/06/2014).
- [6] (). Twonds/punjab, GitHub, [Online]. Available: <https://github.com/twonds/punjab> (visited on 02/06/2014).
- [7] I. Paterson, D. Smith, P. Saint-Andre, and J. Moffitt. (Jul. 2, 2010). Bidirectional-streams over synchronous HTTP (BOSH). This specification defines a transport protocol that emulates the semantics of a long-lived, bidirectional TCP connection between two entities (such as a client and a server) by efficiently using multiple synchronous HTTP request/response pairs without requiring the use of frequent polling or chunked responses., [Online]. Available: <http://xmpp.org/extensions/xep-0124.html> (visited on 02/06/2014).
- [8] A. Fortuna, "XMPP with BOSH," [Online]. Available: <http://www.slideshare.net/AdamFortuna/xmpp-with-bosh> (visited on 02/06/2014).
- [9] (). Strophe - libraries for XMPP poets, [Online]. Available: <http://strophe.im/> (visited on 02/06/2014).
- [10] (). Ejabberd community site | the erlang Jabber/XMPP daemon, [Online]. Available: <http://www.ejabberd.im/> (visited on 02/06/2014).
- [11] S. Larsen, "XMPP intro - the camp2012," [Online]. Available: <http://www.slideshare.net>

net/zooldk/the-camp2012-slides (visited on 02/06/2014).

- [12] D. Huang, "IPv6," Arizona State University, 2014.