# Rustxi - A transaction-based interactive prompt for Rust

Arvind Easwaran, Jason E. Aten, Do Nhat Minh

October 8, 2013

**Abstract**

This is the abstract

# 1 Introduction

The Rust programming language, led by Mozilla Research since 2010, aims to provide safety, concurrency and efficiency.

# 2 Call Graph

The call graph is a graph data structure whose nodes are the top level bindings in the current session of Rustxi and whose edges are the dependencies between the nodes. Through the help of call graph, Rustxi can decide which functions and types need recompilation whenever one node in the call graph is modified.

## 2.1 Implementation

The basic operations of call graphs include the following.

**add**
> adding a new node into the call graph

**update**
> updating the topology of the call graph

**delete**
> deleting a node from the call graph

### 2.1.1 Update