# Pooria Azimi

*Curriculum vitæ*

http://bit.ly/pooria-azimi-cv


365, E2, Ekbatan, Tehran, Iran
+98 (935) 431 26 45
pooriaazimi@gmail.com


## Research Interests

**Database Systems**

**Operating Systems**
*(File systems - IPC - Microkernels)*

**Parallel System Programming**
*(the "Actor Model")*

**Human-Computer Interaction**

## Education

B.Sc. in **Computer Science** (2009 – Present)
**Amirkabir University of Technology** (Iran)
GPA (last 60 CS credits): **16.5**/20

Ranked 590 in 2009 National Matriculation Exam (**top %0.2**)

## Communication Skills

| | |
|---|---|
| English | Fluent |
| Persian | Native speaker |
| German | Basic understanding |

| TOEFL iBT | | GRE General (expected*) | |
|---|---|---|---|
| Reading | 30 | Verbal Reasoning | 160+ |
| Listening | 29 | Quantitative Reasoning | 170 |
| Speaking | 22** | Analytical Writing | 4.5+ |
| Writing | 28 | | |
| **Total** | **109** | | |

* Only the paper-based GRE test is administrated in Iran (with the results being made available on, or after, **December 9th**), but based on a few prep tests, I expect to approximately score as stated above.
* I'm taking another iBT test (with the results being made on **November 12th**) to improve my score in the Speaking section.

## Technical Skills

| | |
|---|---|
| Languages | Java – Ruby – Scala – Objective-C – Erlang – PHP – C – CoffeeScript |
| Databases | PostgreSQL – MongoDB – Neo4j – Redis – Microsoft SQL Server |
| Web | Node.js – Ruby on Rails – PHP – Sinatra – Backbone.js – Ember.js |
| Misc. | git – hg – vi – awk – sed – nginx – WebKit – ANTLR – LaTeX |

## Teaching Experiences

Teacher Assistant ..... Winter 2011
Database Design

Teacher Assistant ..... Winter 2012
Database Design

Teacher Assistant ..... Winter 2012
Artificial Intelligence

Teacher Assistant ..... Winter 2013
Database Design

Presenter ..... Winter 2011
Database Design Course
Database Storage and Indices

Presenter ..... Spring 2012
4th National Linux Festivel
Advanced Unix Command-line

Presenter ..... Spring 2012
AUT-CEIT Computing Festival
Introduction to Node.js

Presenter ..... Spring 2013

AUT Database Workshop

### PostgreSQL vs. MySQL

Presenter ..... Spring 2013

AUT Database Workshop

### Introduction to MongoDB

Presenter ..... Spring 2013

AUT Database Workshop

### Basics of Neo4j and Redis

## PROJECTS

July 2011 – April 2012

Iran Telecommunications Research Center

### Kavandeh Search Engine

Improving link-based web page ranking algorithms in a Persian-only search engine.

Technologies: *Apache Nutch* – *Apache Solr* – *WebKit* – *Java* – *C++*

March 2012 – June 2012

### Visual WebPage Segmentation

Detecting web page structure using statistical analysis of the visual representation of the rendered page content, and using that structure for improving ranking algorithms in a search engine.
(development halted after 4 months due to time constraints)

Technologies: *Node.js* – *PhantomJS* – *MongoDB*

January 2011 – June 2011

### Baygan Database

An extendable and clearly-modulated framework for introducing students to the intricacies of relational database design. Inspired by pintos.
(development halted after 6 months due to time constraints)

Technologies: *Java* – *ANTLR*

June and July 2010

### Embedded Search Engine

A complete search engine (written from scratch), designed to use minimal RAM (60MB) for indexing and searching the English Wikipedia, as the final project for the "Information Retrieval" course.

Technologies: *Java*

June 2012

### MiniJava Parser

A parser, complete with type checking, simple static analysis (of variable and function names in their scope), and an informative web-based UI, for the contrived MiniJava language, as the final project for the "Compiler Design" course.

Technologies: *CoffeeScript* – *jison* – *d3.js*

January 2012

### Secure File System

A "secure" web-based storage solution (i.e., all the encryption happens in the browser), with multiple user support, as the final project for the "Information Security" course.

Technologies: *PHP* – *MongoDB*

April 2012

### 13th International Data Mining Cup

Our team created a bidding agent in Java for the "online" task (ranked 2nd in the Cup), and used a combination of statistical models, neural networks and SVMs for predicting the results of the "offline" task (ranked 13th).

Technologies: *MATLAB* – *Java*

May 2013

### A (simple) Twitter clone

A simple, but fully-featured Twitter clone (with users, tweets, timeline view, following, and an admin interface), as a learning exercise for Ruby on Rails web framework.

Technologies: *Ruby* – *Ruby on Rails* – *PostgreSQL* – *CoffeeScript* – *Sass*

February 2013

### Ad Server

A simple ad server (for tracking ad impressions), as a learning experience for Sinatra web framework.

Technologies: *Ruby* – *Sinatra* – *SQLite*

July 2012

### University Registration System

A complete university registration system (server- and client-side), taking into account all the intricacies of registration process, as the final project for "Database Design" lab.

Technologies: *Microsoft SQL Server* – *C#*

2011 – 2013

### OS X and iOS Apps

Multiple (mostly small) OS X and iOS applications, most notably BetterDictionary and Farhang.

Technologies: *Objective-C* – *Cocoa* – *Core Data*

2010 – 2013

### Open Source Contributions

Contributing to multiple Open Source projects (code, documentation, and IRC support), including Ag (the silver searcher), hg-prompt, Kiwi, Homebrew, and fish shell.

## Awards

2ND PLACE — 13th International Data Mining Cup, Berlin, Germany, 2012

## Online Education

I love online education, and in addition to my normal classes, I have watched the following (freely available) online courses and finished their assignments:

- MIT's legendary Structure and Interpretation of Computer Programs *(1986 – by Harold Abelson and Gerald Jay Sussman)*
- UC Berkley's Operating Systems and Systems Programming *(2008)*
- Harvard's Introduction to Computer Science *(2010)* and Building Dynamic Websites *(2010)*
- Stanford's Programming Methodology *(2007)*, Programming Abstractions *(2008)*, Programming Paradigms *(2008)*, and iPhone Application Programming *(2013)*

I'm also taking the following Coursera courses this semester:

- EPFL's Functional Programming Principles in Scala *(2013 – by Martin Odersky)*
- EPFL/Typesafe Inc.'s Principles of Reactive Programming *(2013 – by Martin Odersky)*