

# Keith Mascarenhas

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## EDUCATION

**Northeastern University**, Boston, MA

College of Computer and Information Science

Candidate for a Master of Science in Computer Science

**Related Courses:** Foundations of Artificial Intelligence, Information Retrieval, Machine Learning, Computer Systems

September 2011 - Present

**G.P.A.: 3.6/4.0**

December 2013

**University of Mumbai**, Mumbai, India

Don Bosco Institute of Technology

Bachelor of Engineering in Computer Engineering

June 2007 – July 2011

**G.P.A.: 3.8/4.0**

## COMPUTER SKILLS

- **Operating Systems:** Linux (Ubuntu), Windows Family
- **Languages:** Python, C, C++, MATLAB, PHP, SQL
- **Web:** Django, Celery, Javascript/ jQuery/ AJAX, CSS, HTML, REST
- **Tools:** Git, Subversion, Bash, Eclipse, Amazon Web Services [EC2, S3], Apache, MySQL Workbench, Pivotal Tracker

## WORK EXPERIENCE

**Full Stack Developer (Entrepreneurial Finance Lab – Harvard Startup)**

May 2012 – January 2013

- **Primary full stack developer** with full ownership over Django based web-app serving 30 financial institutions across 25 countries. Ramped up on Django and got to first code-complete release in 2 weeks.
- **Django WebApp:** Architected and developed 20+ enhancements for WebApp displaying proficiency in Django, jQuery and utilizing MySQL, Google Maps API, jqGrid, jQuery-UI, CSS, AJAX, REST.
- **Git Migration:** Headed process and implemented changes to migrate 6 person dev-team from Subversion to Git by independently researching Git for team workflow process. Also served as subject matter expert for the same.
- **Caching:** Optimized caching framework for Django app using Memcache and Database session-caches consequently reducing page load times by 50%.
- **Celery:** Restructured legacy backend processes to Python-Celery asynchronous task management system.
- **System Administration:** Performed Linux/Apache/Git/AWS administration for Django hosting & deployment.
- Maintained internal blog for knowledge-sharing across team on dev-best-practices for Git, Django and Linux.

**Web Developer (Freelance)**

January 2008 – May 2011

- Structured, designed, developed and maintained 5 websites using Joomla! (CMS)
- Architected and developed a “Movie Review Portal” and “Student Feedback System” utilizing PHP, MySQL, HTML, CSS and Javascript.
- Developed a Javascript based Tic-Tac-Toe game and ported it to Android using PhoneGap.

## PROJECTS

- **Soccer Tweets Analyser**, Boston, MA November 2012  
Developed an app that scans a soccer-fan’s tweets and make predictions about their favourite, least favourite and most discussed team using Python, Tweepy, Information Retrieval algorithms andAlchemy API.
- **Chrome Extension – Bookmarks Search Engine**, Boston, MA October 2012  
Developed a Chrome Extension to search all bookmarked webpages using Python and Google Custom Search.
- **Search Engine in Python**, Boston, MA April 2012  
Constructed a search engine from ground up, that parsed the CACM corpus (3000+ documents), stemmed & stopped 170,000 words. Developed 5 variations of retrieval systems and implemented PageRank algorithm.
- **Face Recognition using Gabor Filters in MATLAB**, Mumbai, India June 2010 – July 2011  
Designed a face recognition system using Gabor filters, MATLAB and documented it with a technical paper.