RAMSEY D'SILVA

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Summary

- Aerospace engineer by training, Computer programmer by choice.
- Highly skilled with an Illustrious career spanning diverse industries and settings. Worked with a full stack of web technologies and wide range of applications.
- Excellent work ethics and communication skills. Passionate, hard working, driven by challenges and goals. Loves finding creative and optimal solutions to any problem.
- Seeking an intellectually stimualiting career in Machine Learning and Data Science with opportunity to grow and learn within the organization

Expertise

- **Languages**: Python, C, C++, C#, Javascript, GO, Bash, PHP, JAVA, MATLAB, Octave
- **Databases**: Mysql, PostgreSQL, Sqlite, MongoDB, MS Access, MS SQL, Oracle, PostGIS, MSSQL
- **Libs/Frameworks**: Django, Scrapy, Celery, ASP MVC, .NET, Requirejs, Nodejs, ExpressJS, JSdom. Mocha, NumPy, Scikit-learn, Theano, TensorFlow, EntityFramework, Active Directory
- **Tools**: Apache, Nginx, Cherokee, Comet PUSH servers, IIS platform, Nuget, Tomcat, Supervisord, Varnish cache, nodeJS, npm, svn, hg, git, Firebug/Chrome Dev Tools, FTP, SMTP (postfix), vnstat, GEOS, GeoIP, TOR, memcached, solr, sphinx, rabbitmq, supervisord, redis, cpanel, plesk, maven, jenkins, hudson CI etc
- **Software**: SAP ERP, CATIA V5, AutoCAD, Fluent, MATLAB, Simulink, Minitab, PowerPoint, Microsoft Office, Photoshop, VIM, Komodo, Eclipse, terminal (command line)
- **Operating Systems**: Ubuntu, CentOS, Solaris, OS X, iOS, Android, Windows (98, XP, '07)

Experience

Pricinity - Search Engine and Aggregator Online Products - Kuwait & Remote
Data Scientist and Full stack web developer (September 2015 to September 2016)

- Built core components of the search engine, from data discovery and mining (via scheduled crawlers), data processing (via elasticsearch and machine learning models) and accessibility (web interface, REST API and Documentation).
- Used scikit-learn, numpy, scipy to perform KNN clustering of product data. Compared results obtained from various classification methods (K-Means, SVM and Recurrent Neural Nets). Trained word vectors with RNNs and a softmax classifier to achieve hierarchical classification of textual data. Used Convolutional NNs for product image classification. Built front end interface to achieve end to end, online supervised learning.
- Backend Application built with Python using Django, Django Rest Framework, Celery, Scrapy and other Python libraries
- Frontend Application built with Javascript using backbonejs, requirejs, d3js, jquery, sass, and other Javascript libs/plugins.
- Other tools used were Nginx as a web server/load balancer, Elasticsearch distributed network for search, Rabbitmq (IPC and distributed task management), Postgresql, Supervisord, Virtualenv, Pip, Npm, Nodejs, Redis cache. Grunt/requirejs for building JS files, bash scripts & Git (Continuous integration, build pipeline).
- Setup web monitoring tools like Kibana, Marvel, Netdata, Rabbitmq-admin. Documentation using Swagger and Readthedocs.
- Adhered to fundamental lean engineering principles and agile development methodologies.
- Developed fluency with linux kernel, memory management, parallelization techniques, Git, Vim and other developer tools/best practices for serious development on a UNIX environment.
- Completed Algorithms 1 and Intro to Machine Learning online courses from Stanford University (on coursera). Attended 2 professional courses offered by elasticsearch.co.

Vena Solutions (Toronto, Ontario, Canada)
Javascript Engineer (March 2014 - March 2015)

❏ Worked on various components of web application helping the company launch their flagship business intelligence product that allows companies to download their excel data to an OLAP cube and run various analytical queries against them.
❏ Built a purely front end web client, that communicates with the server over a REST API. Implemented HTML5 url routing, Built system using requirejs optimizer, Mocha BDD tests
❏ Worked heavily on front end engineering to identify memory leaks, analyze runtime using chrome profiling tools with the goal of avoiding unnecessary repaints, layout thrashing and to speed up execution of Javascript code.
❏ Also carried out google drive integration with the backend application, allowing clients to use google drive in addition to Microsoft excel.

Bombardier Aerospace - Global 7000/8000 Business Jet Program (Toronto, Canada)
Lead Business Application Developer (Aug 2012 to Feb 2014)

❏ Project lead for developing and deploying secure and stable web applications to assist the Global 7000/8000 executive business jets manufacturing line.
❏ Backend built with C# using ASP MVC 4, Entity Framework, Active Directory Domain Services, Nuget, MS SQL. Front end built with Javascript using BackboneJS, RequireJS, D3js, Highcharts etc. Other tools used were Visual Studio, Git Bash, Team Foundation Server on a .NET platform hosted on Microsoft IIS corporate infrastructure.
❏ Oversee architecture and design decisions. Hired, Trained and Mentored a team of 3. Assign/review tasks on a daily basis using SCRUM and Agile methodology. Conduct project requirement gathering and analysis, code reviews, documentation and training.
❏ Optimize UI design and layout to make websites easily navigable by users of all levels of web/computer literacy
❏ Consultant to various business units helping identify bottlenecks and inefficiencies in their internal processes and workflows and subsequently build tools to help optimize those workflows, thereby increasing productivity, efficiency and minimizing delays & costs.
❏ Coordinate roles and responsibilities between various job functions from different teams. Liaise with heads of teams to ensure users are following right protocol and implement checks and balances to enforce adherence to requirements and security restrictions. Ensuring effective deployments of tools to various cross disciplinary teams, end user training and on-going maintenance, development & support.
❏ Travelled to various sites in Toronto and Montreal for meetings and presentations with upper management and other cross functional teams for project scoping, requirement gathering, report project status, updates and product delivery etc.

Trapeze Media & LushConcepts (Toronto, Canada)
Full Stack Web Developer (Aug 2009 - July 2012)

❏ Wrote back end code in python/Java using TDD methodology, automation scripts, continuous integrated delivery pipeline, expert use of distributed version control (Git, SVN and Mercurial). Extensively used Django framework with Postgresql hosted on linux servers.
❏ Participated in coding sprints, code reviews, project scoping.
❏ Thorough understanding of Object Oriented Programming, software development lifecycle, software stack, system architecture and database design.
❏ Developed highly secure and scalable web portals for clients to manage internal processes.
❏ Developed complex sites/applications for clients such as Adobe, Mazda, Chevrolet, Capgemini, Cadbury, Dentyne, Winners, UofT, Virgin Mobile and many other high profile clients.

Pratt and Whitney Canada (Toronto, Canada)
Statistical Analyst Intern (Summer intern 2007, 2008)

❏ Implementation of Pro-cert tools to certify various processes and achieve UTC ACE Gold Certification for the PW300 - PW600 series aircraft jet engines assembly line.

- ❏ Conducted Aircraft engine Test Cell Data Analysis by statistical methods (using Minitab) to investigate ways to minimize HPT vibrations and hence decrease engine sound levels.
- ❏ Working knowledge of the companies SAP software, AutoCAD, CATIA, ANSYS, Minitab and ability to read engineering drawings.
- ❏ Created Macros using VBA on Visual Studio to execute and simplify repetitive and time consuming tasks for Excel documents.

Education

B.Eng of Aerospace Engineering (2005 - 2009)   - Ryerson University (Toronto, Ontario, Canada)

High School (11th - 12th std) (2003 - 2005)   - St. Aloysius PUC (Mangalore, India)

1st - 10th std, 1993 - 2003   - Indian School of Kuwait (Khaitan, Kuwait)

Online Courses

Introduction to Machine Learning (Andrew Ng)   - Stanford University (Coursera)

Algorithms: Design And Analysis (Tim Roughgarden)   - Stanford University (Coursera)

Neural Networks for Machine Learning (Geoffrey Hinton) - University of Toronto (Coursera)

Extracurricular

- ❏ Martial arts training in Taekwondo (black striped belt) and Muay Thai (Intermediate).
- ❏ Plays the piano, violin and saxophone.
- ❏ Paints landscapes, abstract art and portraits in watercolor, acrylic and oil.
- ❏ Loves reading, writing, tutoring and public speaking. Active member of local learning groups.

References Available Upon Request