Vivitsu Maharaja

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EDUCATION

Master of Science, Electrical & Computer Engineering University of Florida, Gainesville, FL.

Bachelor of Engineering, Electronics & Communication Dharmsinh Desai University, Nadiad, India. May 2011 GPA: 62/100

GPA: 3.33/4.0

May 2014

EXPERIENCE

Software Development Engineer, Amazon Web Services, Seattle, WA

Jul 2016 - Present

- Amazon WorkDocs is an enterprise file sharing and collaboration platform. As part of the client team on Amazon WorkDocs, I have worked on the Amazon WorkDocs web & Android clients, implementing and supporting major features as well as being responsible for operational duties that ensure a consistent and successful user experience. Primary technologies used are AngularJS & Java (for Android & other internal frameworks).
- Designed & implemented a web publishing pipeline for the Amazon WorkDocs product blog using the Jekyll & Ruby ecosystem. The website is published to Amazon S3, and served via AWS CloudFront.
- Implemented multiple collaboration features for the Amazon WorkDocs web client, and as part of a team, implemented a redesign of the web client. This included writing new components for major parts of the web client, including the account panel and profile page.
- Implemented collaboration features for the Amazon WorkDocs Android client including threaded comments & support for using Markdown in comments.

Software Engineer, LendingHome, San Francisco, CA

Feb 2015 - Jul 2016

- Designed & implemented a framework to schedule data pipelines using **Celery**, an asynchronous, concurrent task queue. Using this framework, we were able to improve performance of our existing pipelines by more than 100%.
- Implemented data pipelines which funnel all of the organization's internal & external data into our data warehouse, which powers all internal reporting and analytics.
- Developed & maintained a web service using **Flask**, **uWSGI** & **Tesseract** to automatically perform OCR on documents that are uploaded to the platform. The OCR-ed documents are then annotated by underwriters & auditors to speed up loan processing.

Software Engineer, Applied Intelligence, IO Data Centers, San Francisco, CA

Sep 2014 - Feb 2015

- Developed a data processing pipeline using **Apache Pig** to model the power profile of a datacenter using accumulated sensor data, as part of a larger effort to develop a data analytics platform using the **Apache Hadoop** ecosystem.
- Implemented a Pig **UDF** (**User-defined functions**) library in **Java** as part of a 2 person team to handle custom processing of input data including parsing, datetime handling and calculating statistics.

Embedded Engineer, Volansys Technologies, Ahmedabad, India

November 2011 - July 2012

- Developed & maintained a **USB 2.0 (EHCI)** driver, to allow clients on a LAN to boot using an USB to Ethenet adapter.
- Developed components to interface with the **PCI** & **BIOS** subsystems in order to manage the complete **state machine** of the host controller & maintain driver compatibility with adapters from multiple vendors.

PROJECTS

Distributed File System using Java

August 2013 - December 2013

- Designed & implemented a distributed filesystem with a peer-to-peer architecture & chunk based object storage.
- Developed software daemons to detect & react to node failures (fault-tolerance) & ensure data consistency.
- Developed a multi-threaded client application to communicate with the cluster and store data on the filesystem.

SKILLS

- Programming Languages: Java, C, Python, Bash
- Experience with Apache Pig, Oozie, Flume, Hadoop, Redis, Riak, Solr, GNU Make, Apache Maven, Git & SVN.
- Knowledge of Data Structures & Algorithms, Embedded Systems, Virtual Networks.

COURSEWORK

Computer Architecture, Probability & Random Processes, Computer Networks, Distributed Computing, Cloud Computing, Autonomic Computing, Information Retrieval (Guided Research), Virtual Computers.