Vivitsu Maharaja

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EDUCATION

Master of Science, Electrical & Computer Engineering — May 2014
University of Florida, Gainesville, FL. — GPA: 3.33/4.0

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

EXPERIENCE

Software Development Engineer, Amazon Web Services, Seattle, WA — Jul 2016 - Present

- As part of the AWS SDKs and Tools team, I work on AWS' internal SDK release automation platform, which orchestrates daily release of all public AWS SDKs. In this team, I work closely with all the AWS SDK teams, and any service teams at AWS that release services in the public SDKs.
- Improved our platform's notification capabilities by implementing a system that provides customers (AWS service teams) information about pending actions blocking a release.
- Improved our platform's orchestration capabilities by allowing SDK teams to customize their packaging and publishing toolchain from our service.
- Improved platform security by working with the AWS Application Security team to identify security risks in our service, and mitigating them. This work is currently ongoing
- Improved platform reliability by leading an operational review of our service to identify monitoring, alarming, and availablity risks, and implementing mitigations. This work is currently ongoing.
- 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.

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%.
- 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 data processing pipelines using **Apache Pig** to analyze sensor data that monitors the power characteristics of a datacenter. The goal was to identify ooportunities for automating workflows that would reduce overall power consumption.

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 agents 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, Python, JavaScript, Ruby.
- Familiarity with Linux/Unix operating systems, git, bash and various other tools.

COURSEWORK

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