Balaji Chandrasekaran
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SUMMARY

Graduate student with expertise in web and mobile application development and database systems seeking a full-time opportunity to contribute towards the development of software.

EDUCATION

Master of Science in Computer Science, Arizona State University. (**GPA – 3.6/4.0**) **MAY 2017**
Bachelor of Engineering in Computer Science, Anna University. (**GPA – 3.5/4.0**) **MAY 2014**

SOFTWARE PROFICIENCY

Languages	:	Java, C++, C, C#, Python, Scala, Swift.
Web Technologies	:	ASP .NET, JavaScript, PHP, HTML, CSS, AJAX.
Databases and Big Data	:	Hadoop, Apache spark, Mini Base, MySQL, SQLite, PostgreSQL, PL/SQL.
Tools	:	Eclipse, Android Studio, Visual Studio, XCode, NetBeans.
Repositories	:	Mercurial, Git.

WORK EXPERIENCE

Programming Aide - Herberger IT, ASU. (SharePoint, C# .NET, PHP, Bootstrap): **July 2016 – Dec 2016**

- Developed and maintained an internal site using SharePoint that included several dynamic JS objects.
- Migrated several web pages from PHP v4.x to v5. x.

Research Intern - Amazon India Pvt. Ltd. (VBA): **Sep 2014 – May 2015**

- Automated the entire process of exhibiting the products on the Amazon Web Site.
- Handled complaints by diligent interaction with vendors and manufacturers to gain insight on the respective requirements.

Associate Software Engineer - Accenture Services Pvt. Ltd. (MySQL, C#, .NET): **Jun 2014 – Sep 2014**

- Maintained the back-end database for supply chain management of Microsoft Products.
- Data Mining, Consistency checking and managing the database schema was an integral part of my team.

ACADEMIC PROJECTS

- **Geospatial Data Processing (Apache Spark, Scala, Hadoop, Python and JAVA):** Performed geospatial operation using Geo spark on distributed data with the help of a local HDFS and a spark cluster. Used ganglia to monitor the cluster performance. Performed a Spatio-temporal hotspot analysis of New York Yellow Taxi data set and calculated the top 50 hotspots using Getis-Ord correlation. (SIGSPATIAL GIS CUP 2016) **Fall 2016**
- **Multidimensional Mini Base (Mini Base, Java, JSI library):** Extended the Mini Base in order to account for multidimensional information. Java Spatial Index (Rtree) was used to implement the multidimensional indexing. Operations like object distance estimation and object intersection etc. were also performed. **Summer 2016**
- **HATEOAS (Java, NetBeans, Glassfish 4.1):** Developed a RESTful Web Service using Hypermedia as the Engine of Application State (HATEOAS) for the purpose of dynamic response generation to implement a Grading and appeal system. **Spring 2016**
- **Portals (Java, libGDX):** Designed and developed a 2D board game using the libGDX framework that allowed players to navigate their pawns according to the roll of a die from the start to the finish helped or hindered by the portals. **Spring 2016**
- **Android Application (Android Studio, SQLite):** An Android application named as "DEVIL's EVENT" for organizing an event which uses the context information obtained from the data provided by the user and obtained from location, weather etc. intelligently. **Fall 2015**
- **Adaptive Computational Offloading Using Mobile Cloud Computing (Java/Android, Eclipse, AWS):** Created an intermediate framework support which would adaptively offload the expensive computational parts of an application to the cloud. It had an intelligent decision-making algorithm which would decide during runtime whether to offload the current computation based on parameters like power, bandwidth and speed of the local device (Mobile phone) and the support kept evolving during each run by averaging out the execution times, hence making it more accurate. **Fall 2015**
- **Compiler Design (C/C++):** Designed and implemented lexical analyzer, parser and intermediate code generator for a programming language that had semantics like Java. **Fall 2015**
- **Operating System Development (C, Linux):** Developed routines for implementing non-preemptive OS scheduler for a multithreading environment. Developed a client server application with send and receive distributed message passing system. Built the system using semaphores, monitors, mutexes implementing the reader's-writer's problem. **Fall 2015**