# BABU PRASAD DHANDAPANI

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# **EDUCATION**

MS, Computer Science, University at Buffalo, The State University of New York - GPA – 3.57/4

Dec-2014

B.Tech, Information Technology, Amrita University, India - GPA – 8.04/10 (First class with distinction)

May-2009

## **WORK EXPERIENCE**

## **Motorola Solutions**

#### **Summer Intern**

Jun 2014 - Aug 2014

- Increased user productivity by 15% by creating 'ScanAndPair' tool that will scan device barcode and perform Bluetooth Pairing which was done manually before (Android - Java).
- o Developed credit/debit card **Payment APIs (Android Java)** for integrating Motorola devices with **Bluetooth POS** terminals.

# **Honeywell Technology Solutions**

# **Senior Software Engineer**

Apr 2010 - Aug 2013

- Innovated and demonstrated proof of concept (POC) for an idea on 'Automatic Device Location Tagging' by scanning NFC tags
  & fetching GPS co-ordinates during site commissioning (Android Java).
- Created 'MAXPRO Mobile' Video Surveillance Android App to stream live/playback surveillance video through 'Http Live Streaming' (HLS) and to manage alarms that enables real-time notification even when users are travelling.
- o Packaged setups & Automated nightly build for MAXPRO VMS using Basic MSI, Visual Build Pro and Jenkins.

## **HCL Technologies**

## **Software Engineer**

Dec 2009 - Apr 2010

Developed and integrated user profile module to manage user preference for 'USAA Web Application' using struts framework,
 JSP, Servlets and DB2.

# **Honeywell Technology Solutions**

# **Summer Intern**

Jan 2009 - May 2009

 'Automation in .NET Application Development' - Eliminated manual steps and increased developer productivity by creating automation tools such as 'Sandcastle Document Generator', 'Clearcase Helper' and 'Batch Build'

## **SKILLS**

Languages: Java, Android, C, PHP, Shell Script, HTML, JavaScript, SQL Server.

Tools: Eclipse, Visual Studio, Git/Clearcase/SVN, Jenkins, Visual Build Pro, Knowledge of Hadoop.

Process: Agile software development (Scrum), Continuous Integration, Six Sigma (Green Belt) - Software.

## **PUBLICATIONS & CERTIFICATIONS**

- 'Information Flows as Android Permission Mechanism' An extension to existing permission mechanism that allows user to examine and grants permission based on cross-app information flows. (IEEE/ACM Conference ASE 2014, Sweden)
- Sun Certified Programmer in Java (SCJP) completed with 98% score.

### **AWARDS**

Outstanding Achiever Award, Individual Excellence Award, Partner Award, Team Excellence Award & Spot Awards First prize (Java debugging contest), First Prize (InfoQuest project presentation), UB-Hacking 2014 participant.

### **ACADEMIC PROJECTS**

- Wakelock Resource Accounting (Android, AOSP): Resource specific device power management by modifying the current Android framework layer and controlling background apps behaviors through Wakelock permissions. (Dec' 14)
- GrabImage Object recognition App (Android, Java): Mobile app developed for UBHacking 2014 which analyzes the picture using image recognition APIs and lists down Google and Amazon results of the product. (Nov' 14)
- o **Twitter Data Analysis (Java, Hadoop):** Analysis and visualization of Twitter data for trending topics, co-word occurrence, relative frequency and k-means clustering using MapReduce techniques in Hadoop. (May'14)
- OS/161 Process Syscalls & Virtual Memory (C): Implementation of process system calls (fork, execv, getpid) and virtual memory functionalities (malloc, coremaps, TLB) for simplified operating system OS/161.

  (Apr'14)
- Chord Distributed Hash-table (Android, Java): Implementation of Distributed Hash Table using Chord protocol with the node partitioning, node join and ring based routing of messages across android devices. (Apr'14)
- o **TravelSuggest Search Engine (PHP, Apache Solr, JavaScript):** Search engine suggesting travel destinations based on user preference featuring drill-down approach, faceted search, Geo-location search & user based personalized search. (Jan'14)
- Wikipedia Search Indexer (Java, SQL): Search Indexer comprising of parser, tokenizer, analyzer and indexer processing multiple Wikipedia documents and generating optimized Search Index for faster retrieval of documents. (Nov'13)