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MITHUN DESHPANDE

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EMPLOYMENT

Systems Engineer	Tata Consultancy Services – Barclays	Oct 2013 – Jun 2016

Digital Card:
   Followed **Agile** practices and **Proof of Concept** driven approach throughout the development and was involved with end to end software development cycle. Developed mobile screens as per business design team. Created application Front-end in **Android Studio**. Integrated **Facebook SDK** with an application to add **Digital Gift Cards** feature in an application. Implemented **GCM** notifications. Built data gateway with **MySQL** and **RESTful** API. Around **10k+** downloads.

BMB Application Framework:
   Built customized widgets and security container to simplify developer's task for **gateway communication**. Developed **Event bus** mechanism to ease communication between lower layer and view layer of the application. Built **API wrappers** to integrate third party libraries which includes social sites and adobe analytics. Created the Technical Specification Document, supported System Integration Testing (SIT), User Acceptance Testing (UAT) and product migration. Currently in use by Barclay's team to minimize the time needed for the mobile application development.

AliPay:
   Implemented **Barcode** scanning module. **Optimized** code for existing modules to the greater extent. Developed module screens Payment, Refund and Transaction History to ease merchant payment processing in **Android Studio**.

EPOS:
   Created RESTful API's backend, **database design** and maintained **Data Analytics** for inventory and offer management systems. Built Onboarding and Login module for both Merchant and Employee using **AWS** (used Linux and MySQL server instance).

Customer Chat Bot:
   Built **Proof of Concept** Customer Troubleshooting desktop system based on **AIML** natural language processing and pattern matching to answer Barclay's customers queries quickly rather than relying on support team. Typing query would return with multiple answers and steps to resolve the issue in addition to the voice recognition system support. Achieved client appreciation certificate.

Assistant Systems Engineer, Intern	Tata Consultancy Services - HSBC	Jul 2013 – Oct 2013

Workforce Management System
   Replaced **XML based manual resource** handling process with an **automated software tool**. Implemented profile filtering, tracking, record generation and role based work lists features. Developed Dashboard module to check recent updates. Tool currently in use by Project Manager teams at TCS.

EDUCATION

Masters in Computer Science	SUNY – Binghamton	Aug 2016 – May 2018

Courses: Adv. Object Oriented Programming; Machine Learning; Computer Architecture; Algorithms; Systems Programming; Programming Languages; Operating Systems.   **GPA:3.6/4.0**

Bachelor in Computer Science	GECA – India	Apr 2009 – Apr 2013

Dean's list for consecutive 3 semesters   **GPA:8.9/10.0**

TECHNICAL EXPERIENCE

- **Container in C (2017).** Implemented deque generic container using preprocessor macro. C++, Linux
- **Map in C++ (2017).** Implemented a container class template named Map like the map class from the C++ standard library. C++, Linux.
- **Matrix multiplication IPC (2016).** Implemented client-server matrix multiplication using inter-process communication mechanism such as anonymous pipes, named pipes, sockets, and shared memory. C, Linux
- **JProbes to track page faults (2016).** Implemented kernel module that logs all the virtual addresses of a running process and the time at which process generates page faults. Written user application to display the output on the command line. C, Linux Kernel
- **Multiple producer and consumer problem (2016).** Concurrent implementation of multiple producer and consumer problem producing lines at the user level and consuming them at the kernel module level using semaphore primitives. C, Linux Kernel.
- **Decision tree and reduced error pruning algorithm (2017).** Trained a classifier with a huge dataset of CSV files by preprocessing and performing feature selections to construct the decision tree for the classification. Performed pruning on trained classifier. Linux, Core Java.
- **Active process list retrieval module (2016).** Written kernel module to retrieve currently running processes and built user interface to display it on the console. C, Linux Kernel.

ADDITIONAL EXPERIENCE AND AWARDS

- **Instructor (2013):** Supervised 10 students C, C++ technical skills during Initial Learning Program TCS Training. Conducted technical workshops.
- **Third Prize, Senior Projects:** Awarded 3rd prize for AJAX Web Browser project, out of 35 projects during intra-college project competition.
- **Head, Event Organization Committee:** Managed a team of 15 people for organizing various social and technical events at GECA.
- **Problem Setter for CompsaFest'12:** Set problems for C programming contest in 2012 at GECA.

Languages and Technologies

- C++; C; Java; Python; Android; JavaScript; SQL; HTML; CSS
- Android Studio; Eclipse; Spring Tool Suite; Git
- Database; MySQL; Oracle (10g+)