# **DIVYA NAGAR**

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EDUCATIONAL BACKGROUND			
Examination	Institute	Year	CGPA / %
B.Tech System Science	Indian Institute of Technology Jodhpur	2016	7.6
Intermediate R.B.S.E	Jyoti Bal Senior Secondary School, Kota	2012	83
Matriculation R.B.S.E	Jyoti Bal Senior Secondary School, Kota	2010	88.33

## **INTERNSHIPS**

#### **Google Summer of Code 2015**

May 2015 – Aug 2015

- Worked with Tux4kids to design and develop cross platform games for kids to learn basic English
- Developed 9 modules having 30 cross platform games using UNITY-5.0 and C# scripting
- Gained experience of open source development and learned to handle GUI issues in cross platforms

#### **University of Applied Science Northwestern Switzerland**

May 2015 - Aug 2015

- Worked as a programmer and research assistant in the research project Cloud Socket
- Developed an online Master Thesis Library using PHP and MySQL for the website of MSC BIS Program
- Implemented graphical representation for OMG Business Motivation Modelling Language in Adoxx Platform
- Learned different meta modelling languages and also developed enterprise architecture language Archimate

#### **PROJECTS**

#### **Multi-Constrained Optimized Travel Planner**

Aug 2015 – Ongoing

- Designing an algorithm for optimized travel map creation while satisfying budget and time constraints
- Analyzing performance of Bi-Objective Optimization and Goal Programming for algorithm designing

### **Encryption Algorithm Using Chaotic Sequence**

Sep 2014 – Nov 2014

- Analyzed an algorithm for image encryption and implemented it using Chaotic Sequence and Plain Text
- Worked in MATLAB for Implementation and to generate the key which allows to decrypt the cypher text

#### Web Chat Application

Feb 2015 – Apr 2015

- Implemented a web chat application with the features of private chat, group chat and room creation
- Used Node.js, Express and Socket.io for backend and HTML, CSS, Bootstrap for designing

#### **Unix Shell**

Jan 2015 – Feb 2015

- Developed a basic Unix shell which can handle basic I/O redirections, piping and append background processes
- Applied process forking and exec() functions to implement the basic and executable commands like cd, mkdir, python

#### **Human Identification Based on Gait**

May 2014 – Jul 2014

- Studied Wavelet transform, Hough transform and Bounding Box algorithm, Implemented and tested these on a walking image sequence for the extraction of dynamic features and static features of a human walking cycle
- Successfully got 70% classification rate and used K-Nearest Neighbors algorithm for classification

#### **Simulation Program for Analyzing paging algorithms**

Feb 2015 - Mar 2015

- Simulated and analyzed the performance of page replacement algorithms like LRU, Clock, FiFO
- Implemented it in C and used pre-demand paging techniques with pre-paging features

#### **Library Database Management System**

Oct 2015 - Nov 2015

- Created a library database management system with features of issue, re-issue and return of documents
- To reduce the time complexity for most recently accessed document used AVL Tree data structure

#### **POSITION OF RESPONSIBILITY**

### **Co-Lead - Google Developers Group Jodhpur**

- Organized 13 events in six months with overall participation more than 1000
- GDG Jodhpur was awarded Best Developers Group of Asia in GDG Asia Summit 2014-2015

# Assistant Coordinator - Counselling Service, IIT Jodhpur

- Insured the smooth functioning and shaped the working culture of one of the most premier body of IIT Jodhpur
- Helped students and their guides in case of them facing any difficulty in their regular counselling challenges