

AMAN KISHORE ACHPAL

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ACADEMIC HIGHLIGHTS Class 10 [ICSE] – 93% (PCM 94.5%)
Class 12 [PUC] – 90.1% (PCM 94%)
CGPA [PESIT] – 9.50

EXPERIENCE **MEMBER OF TECHNICAL STAFF AT ORDELL UGO**
Ordell Ugo is a “virtual entity”, a research Centre at PESIT. It is run by the Head of Department, Computer Science, Prof. Nitin V Pujari. Students are assigned research projects in various domains, and the projects I have worked on are listed below.

TEACHING ASSISTANT TO PROF. NITIN V PUJARI (HOD, CS)
I was a teaching assistant for a course on Programming in C. I assisted Prof. Nitin V Pujari in teaching 1st year UG Students the basics of Programming in C.

TECHNOLOGY STACKS:

- Proficient in Java (5 years of study)
- Proficient in C (3 years of study)
- Proficient in Android
- Proficient in SQL
- Acquainted with Python
- Comfortable with Discrete Mathematics, Database Design, Linear Algebra, Analysis and Design of Algorithms, Data Structures.

RESEARCH INTERESTS Information Retrieval
Textual Data Analysis
Machine Learning

COURSE PROJECTS **DATA STRUCTURES IN JAVA**
Implemented a graph database in Java to model a family tree. Implemented Dijkstra's Algorithm in order to find the relation between two family members.

ANALYSIS AND DESIGN OF ALGORITHMS
Source Code Plagiarism: Compare two input files (C Programs) to identify if either one has been plagiarized. Currently handles change in variable names, function names, ordering of functions, adding/removing comments. In the process of implementing a new algorithm.

DATABASE MANAGEMENT SYSTEMS

Hostel/PG management system using PostgreSQL as the backend and Java as the frontend.

RESEARCH PROJECTS

WEB SCRAPER/PRESENTATION TOOL

Wrote a web-crawler to index pages given a URL. It then scrapes the main content of the page, and tags the data. It judges relevance of the data to the URL via tags, and summarizes the most important data. It then creates a presentation from the summarized data.

ELGG INSTALLER

Wrote a one-click script to deploy XAMPP server with open-source social network Elgg pre-installed. Handled permissions, set-up of the server, etc.

DATA VISUALIZATION TOOL

Used Shiny as the frontend and R as the backend to make a data visualization tool to visualize data-sets as Table Plots, Histograms, Line Graphs, Point Graphs and Box Plots. Additionally, it also visualizes data from Stack Overflow by utilizing their API.

HOBBY PROJECTS

SAFETY-NET

A panic-button application for Android. It differentiates itself from existing solutions by taking into account the context in which the emergency was raised. It takes into consideration parameters such as Location, Age, Willingness to help, Physical Fitness, Mode of transport, etc, when deciding who is to be alerted in order to aide a victim. An in-detailed explanation can be found at <http://goo.gl/2R69WW>.

VIRTUAL RIOLITY

Virtual Riolity was a Virtual Reality application/game made for tourists of the Rio 2016 Olympics. It had technical features like one-time download of points of interest (to conserve bandwidth), and pulled in a lot of features like translation, camera, slideshow, leaderboard, and more. An in-detailed explanation can be found at <http://goo.gl/LfP6v1>.

HOUSE/APARTMENT RECOMMENDATION ALGORITHM

Wrote an algorithm (with an Android/PHP implementation) to recommend a locality to purchase a house in. It takes into consideration points of interest (workplace, schools, hospitals), food preferences (favorite cuisine, extroverted nature, via Facebook Checkins), Culture of the neighborhood (Personality matching after semantic Analysis of Facebook Posts) and Distance (Mean travel time of all points from centroid of convex hull formed by the points). An in-detailed explanation can be found at <http://goo.gl/CeR8VD>

PHONE BRIDGE

The aim was to create an Android application that acts as a combination between Stack Overflow and Team Viewer for mobile phones – To aide people with minimal experience in using phones to use their smartphone efficiently. To bridge the gap between owning a smartphone, and using it. An in-detailed explanation can be found at <http://goo.gl/I3yhi1>

OTHER TECHNICAL
ACHIEVEMENTS

- 1st place, Ayana hackathon at PES University, 2015
- Top 10 teams, Global ATOS IT Challenge 2015 (ongoing)
- Top 10 teams, Global ATOS IT Challenge 2014
- 2nd Place, Incito 2014
- Top 10, Incito 2013
- 2nd place, SAP Labs Hackathon (named Code to Empower Her) (organized by NIT Trichy)
- Top 10, ImpressIT 2013 (organized by SAP Labs and IT-BT department, government of Karnataka)

HOBBIES AND
OTHER
ACHIEVEMENTS

Apart from Technology and Computer Science, I am also an active parliamentary debater. My achievements in the field are as follows:

In the one year he has been debating, Aman has won the national level Asian parliamentary debate at the National University for Advanced Legal Studies, Kochi. Additionally, he placed runner up in the novice category at the national level British parliamentary debate at MS Ramaiah College of Engineering, Bangalore, and made the Quarter Finals at the national level British parliamentary debate at Stella Maris College, Chennai.
