

Narendra Nath Joshi

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SUMMARY

A computer science major with experience in search and analytics, aspiring higher education in data mining, machine learning, information retrieval domains.

EXPERIENCE

Product Engineer, Sensara Technologies August 2015 - Present

Played a pivotal role in the creation of <http://adbbreaks.in/>, an open, real-time semantic search engine of television advertisements in Indian channels.

Co-op Intern, Intuit January 2015 - July 2015

Worked as a part of the mint.com platform team (development and validation)

Core Member, PESIT Entrepreneurship Cell March 2014 - April 2015

Founding and core member of the publications team of PESIT Entrepreneurship Cell and was responsible for the management and reporting events.

Member Technical Staff, Ordell Ugo, PESIT June 2012 - June 2014

Part of research team which analysed voluminous agricultural data and studied patterns of sowing and harvesting to suggest crops to farmers for the next sowing season so as to optimise profits.

EDUCATION

- PES Institute of Technology(PESIT), Bangalore, India — BE Computer Science and Engineering (2011-2015)

GPA: 9.29/10 (previous three semesters - 9.88/10, 9.68/10, 10/10)

- Coursera — Pattern Discovery and Data Mining, Text Retrieval and Search Engines, Cluster Analysis in Data Mining

PUBLICATIONS

- Co-author of the paper on **An Amalgamated Model Of Information Communication Technology And Catering Services Mapped To Mobility Based Entities To Nurture Economic Growth In Rural And Semi-Urban Areas** in **National Conference on Management and Technology for Skill Development: Innovative Approaches 2014**, India

SKILLS

Languages and Technologies

C, Java, Python and Android

HTML, CSS, JavaScript, PHP and JSP

Domains and Concepts

Data Structures and Algorithms

Machine Learning

Data Mining

Database Management Systems

Natural Language Processing

Social Network Analysis

Web Technologies

Programming Languages

Computer Architecture

Computer Networks

Formal Languages & Automata Theory

Operating Systems and UNIX

Development Environments and Tools

Weka Machine Learning Library

Eclipse and Eclipse-based IDEs

Python Natural Language Toolkit

IntelliJ IDEA

Django

Notepad++

VIM

Databases

MySQL

IBM DB2

MongoDB

Version Control

Git

SVN

PROJECTS

Driver Fatigue Detection System

Undergraduate final year project where the system used computer vision and machine learning to keep track of the driver's mouth to detect yawns and eyes to detect blinks. The system would use the blink duration and blink velocity to determine if the driver was drowsy and would alert the driver if found so. This decision was supplemented by monitoring eyes using OpenCV and by monitoring mouth using a custom-built yawn detector developed using face recognition and supervised classification.

Agri Yield Consumption and Mill Data Analytics

A research project which spanned over fifteen months involving data analysis and prediction. We analysed voluminous agricultural data and studied patterns of sowing and harvesting. Created a set of time series which would help us estimate methods by which to suggest crops to farmers for the next sowing season so as to optimise profits.

Automatic Mobile Phones Customer Care Bot

Created a customer care bot for mobile phones using n-gram models and supervised MaxEnt classification using Markov models. The bot could accept and answer English

queries ranging from the price of a particular model to feature comparison between two devices.

Timetable Generator

Developed a Timetable Generator as a part of the Algorithms course in a team of three. It is an application which generates valid and legitimate timetables for educational institutions depending upon their courses and workload. It was developed in Java.

Infra An Android based Remote Control for PC

Developed an android application as a part of the Mobile Systems and Engineering. It is an application which facilitates the control of a PC or desktop through an Android app interfacing via the internet.

Engineering Results

Developed a web-based application as a part of the Software Engineering course which provides a system for handling results of multiple institutions. It was developed in HTML/CSS/JavaScript and PHP/MySQL. I was the coordinator and team leader in the project.

WTP for Typing Party

Developed a JavaScript-based typing game as a part of the Web Technologies course in a team of two. It is a game which tests and improves the typing speed of a user with different modes of gameplay. It was developed in HTML/CSS/JavaScript and PHP/MySQL.

OTHER ACHIEVEMENTS

- **Selected as the best project in the class of 2015** under the Social Impact category at Prakalpa 2015, PESIT's annual fair to showcase the best innovative projects of that academic year.
- **Won Android-based hackathon at Intuit 2014** - Developed an which could interface with a laptop or a PC with advanced functions like file operations, media handling and administrator functions
- **Stood 2nd**, Google India Technology Quiz
- **Stood 2nd**, eBay University Programs Technology Quiz
- **Finalist (top three), SAP Lumira University Program hackathon 2014** - Developed an algorithm which compared phone apps on different app markets and determined which app is performing better on which app stores using rule-based regression
- **Finalist (top five), Ayana, PESIT's annual flagship hackathon 2014** - Developed a prototype of a web browser extension which studied and learnt user behaviour patterns by mapping and generating heat-maps of mouse movements and clicks

- **Finalist (top ten), IBM The Great Mind Challenge 2012** - Developed an application framework which provides train passengers a better travel experience by providing them fresh and wholesome food, thereby enabling employment opportunities in rural and semi-urban areas
- **Completed TagMe Machine Learning Competition 2014, Indian Institute of Science** - Developed an image classifier using supervised learning techniques

PERSONAL INFORMATION

Date of Birth : October 6th, 1992

LinkedIn : <https://www.linkedin.com/pub/narendra-nath-joshi/56/100/76a>

GitHub : <https://github.com/narendranathjoshi>