### Nitish Bhardwaj @git @linkedin

EDUCATION			
2009-14	B.Tech+M.Tech (IT)	Indian Institute of Information Technology and Management, Gwalior	8.0/10
2008	Class XII	Tagore International School, New Delhi (CBSE)	80.0%
2006	Class X	Holy Mission High School, Bihar (CBSF)	83.4%

#### **SUMMARY**

Research Lead with around 3 years of experience in Data Science focusing Deep Learning, Machine Learning, Computer Vision,Internet of things (IoT) and Big Data.

#### **SKILLSET**

**Programming Languages:** Python, C/C++ **Tools & Technologies:** Docker, Git

Frameworks: Keras, Tensorflow, Caffe, Theano

#### **WORK EXPERIENCE**

# Mu Sigma Inc., Bangalore Currently leading a team of four members on project of Tracking Human in a crowded scene using using Deep Learning techniques.

#### Apprentice Lead, I&D

 Working on development of an API based tool for detection, tracking and tracks-visualization of Humans in crowded scene.

- Worked on different modules of the project, experimented with different detection algorithms and various tracking techniques to keep the tracks despite occlusions.
- Integrated different modules and working on making the end-to-end model as a service.

## Senior Research Analyst, I&D

#### Mu Sigma Inc., Bangalore

Aug'15 to Dec'16

- Worked on end-to-end development and deployment of image classification tool for some pre-defined classes.
- Explored deep learning frameworks and worked on data preparation, hyper-tuning training model parameters and integration of algorithm into deployment framework.

Led a team of three members for a project of Face Recognition using Deep Learning.

Led a team of three members for a project on Image Classification using Deep Learning.

- Worked on development and deployment of face recognition system.
- Explored various deep learning models, implemented them in different framework to benchmark computation and deployed in real-time scenario for face detection and recognition.

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#### Mu Sigma Inc., Bangalore

Aug'14 to July'15

- Joined Mu Sigma's research arm, the Innovation & Development group.
- Completed benchmarking SQL capability on Hadoop.
  - Wrote a white paper on benchmarking major big-data frameworks like Hive, Impala, Stinger and Spark based on different queries with data of various scales.

#### Research Analyst, I&D

- Evaluated and deployed Semantic Web Frameworks like PowerAqua, Quepy
- Explored Semantic Web technologies, Machine Learning tools like Triplets and decision trees, evaluated and deployed Natural Language Processing toolkits
- Worked on development of cloud based solutions for software deployment and automation using Docker, izpack. Automated deployment of various services like Kafka, Cassandra, Postgres for providing an IoT solution on miniature computing boards (Raspberry pi, Odroid).

## Research Intern

#### **ABB Corporate Research Center, Bangalore**

Mar'14 to July'14

**Querying Network Database System –** an implementation of Query Optimization techniques in a cluster of different databases.

- Meta data manager for PostgreSQL on Visual Studio, Integration of various data sources like XML, CSV, MySQL dump and NoSQL DB (mongoDB)
- Graph Data query using Graphchi and Powergraph

	IIMnet Ventures, Bangalore May '13 to June'13
Application Developer (Intern)	<ul> <li>marketEnomics - an online marketing data analysis tool.</li> <li>Worked on development of a part of the application involving monitoring the activities of campaigns of various social networking websites, providing detailed analysis on effectiveness of various sources of advertisements.</li> </ul>
Application Developer (Intern)	Intellimate , IIT Kanpur, Kanpur '10  May'10 to June
	<ul> <li>Worked on development of a college management and inventory management software using HTML, PHP, MYSQL and AJAX.</li> </ul>
ACADEMIC PRO	DJECTS
	<ul> <li>Sentiment Analysis in the context of Social Media Networks         To model a natural language processing toolkit to infer users' sentiment analysis for study of feedback about a product, person or thing using the means of social media interactions. Python's NLTK is used along with Facebook API for data gathering to collect the data, filter the noisy data, extract contextual information, use Sentinet's Polarity dictionary to conclude agreement analysis of the people.     </li> <li>Dynamic Traffic Routing System using Soft Computing         Developed an Android based Mobile Application designed to dynamically schedule the best routing path for the given source and destination at a particular time and the data at the server side being updated heuristically with MATLAB tool for prediction. The mobile application is cost-efficient and deals with dynamic scenarios and uses Soft Computing tool for prediction in decision making.     </li> </ul>
	Digitalization of Application System     Developed an online application system using HTML,PHP,AJAX,MYSQL and JavaScript which offers Design of application form, Online form processing and Data analysis, e.g., Leave management module, Records of allowances given, Records of sponsored papers and their status (published/unpublished) etc.
ACHIEVEMENT	
	<ul> <li>Won 1<sup>st</sup> prize in Robotics Zonal Level under ROBO-OPUS at ABV-IIITM, Gwalior in 2009.</li> <li>Won 2<sup>nd</sup> prize in web-mania, i.e., Web- Designing contest at Infotsav'10- techfest of IIIT Gwalior in November, 2010.</li> <li>Won 2<sup>nd</sup> prize twice in Programming Contests organized by Abhigyan Abhikaushalam Students' Forum, ABV-IIITM Gwalior in session 2010-2011.</li> <li>Qualified online round of ACM-ICPC (Association for Computing Machinery-International</li> </ul>
	<ul> <li>Collegiate Programming Contest) Asia Regionals Amritapuri and IIT-Kanpur in 2011.</li> <li>Secured 13<sup>th</sup> rank in onsite contest of ACM-ICPC Asia Regionals Amritapuri in 2011.</li> <li>Won 1<sup>st</sup>prize in Case Study Contest organized by Abhigyan Abhikaushalam Students' Forum, ABV-IIITM Gwalior in March, 2012.</li> <li>Qualified online round of ACM-ICPC Asia Regionals Amritapuri and IIT-Kanpur in 2012 and Secured 15<sup>th</sup> rank and 19<sup>th</sup> rank in onsite contest of ACM-ICPC Asia Regionals.</li> <li>Won 1<sup>st</sup>prize in Programming Contest organized by Abhigyan Abhikaushalam Students' Forum, ABV-IIITM Gwalior in March, 2013.</li> <li>Certified for completing "Google Analytics Platform Principles" course by Google Analytics Academy in March, 2014.</li> <li>The research paper entitled as "Users' Sentiment Analysis in Social Media Context using Natural Language Processing" has been accepted at International Conference on Digital Information, Networking and Wireless Communications (DINWC2014), at VSB-Technical University of Ostrava, Czech Republic.</li> </ul>