

# Apurva PATHAK

## PERSONAL DATA

---

PLACE AND DATE OF BIRTH: Jashpur Nagar, India | 10 July 1991  
ADDRESS: Building 2, Microsoft Campus, Gachibowli, Hyderabad-32, India  
PHONE: +91 8790422800  
EMAIL: [technoapurva@gmail.com](mailto:technoapurva@gmail.com)  
WEBSITE: <http://www.apurvapathak.me>

## OBJECTIVE

---

To build a career in the field of Computer Science which can accommodate my knowledge of Machine Learning and Data Mining.

## EDUCATION

---

APRIL 2013 Undergraduate (Bachelor of Technology) in COMPUTER SCIENCE & ENGINEERING  
**National Institute of Technology**, Rourkela, India  
CGPA: 9.50/10 - 2<sup>nd</sup> in the department out of 75 students

APRIL 2009 High School (Class 12) at **Krishna Public School**, Bhilai, India  
PERCENTAGE: 90.0%

APRIL 2007 Secondary School (Class 10) at **Deosharan Public School**, Jashpur, India  
PERCENTAGE: 88.0%

## AREA OF INTEREST

---

Machine Learning, Data Mining, Artificial Intelligence

## RESEARCH EXPERIENCE

---

OCT '14 Presented a paper on *Clustering based approach to improve diversity and novelty of RS* at **Practice of Machine Learning Conference 2014, Redmond**.  
I proposed a hierarchical clustering based approach to recommend novel and diverse items with minimal loss of precision for recommender system.

JAN - APRIL '13 Designed an algorithm, *S-SIFT*, for feature extraction from iris image. | Advisor: Prof. Banshidhar MAJHI, NIT Rourkela  
Proposed an algorithm by combining S Transform and Scale-Invariant Feature Transform (SIFT) to extract features from iris image. The matching accuracy of the proposed algorithm was found to be at par with the other state-of-art feature extraction algorithms. This algorithm is included in my final year research thesis.

JULY - DEC '12 Designed an algorithm for reduction of noise due to specular highlights during Iris Segmentation. | Advisor: Prof. Banshidhar MAJHI, NIT Rourkela  
This algorithm is included in my final year research thesis.

MAY - JUNE '11 A research project on *Model based regression test case selection technique* as a part of summer research fellowship program at **Indian Institute of Technology, Kharagpur**. | Advisor: Prof. Rajib MALL, IIT Kharagpur  
The work mainly consisted of understanding and implementing the dependence algorithms of program model for regression test case selection.

## PUBLICATIONS

---

1. **Pathak, Apurva**, Patra, Bidyut Kr. *A City Traffic Dashboard using on Social Network Data*. 2015 | URL: <http://dx.doi.org/10.1145/2778865.2778873>  
Conference on Data Sciences 2015., IKDD, ACM
2. **Pathak, Apurva**, Patra, Bidyut Kr. *A knowledge reuse framework for improving novelty and diversity in recommendations*. 2015. | URL: <http://dx.doi.org/10.1145/2732587.2732590>  
Conference on Data Sciences 2015, IKDD, ACM
3. **Pathak, Apurva**, et al. *Clustering based approach for balancing diversity and accuracy in collaborative filtering*. 2014. | URL: [http://ds2014.ijs.si/lbp/DS2014\\_LBP\\_Pathak.pdf](http://ds2014.ijs.si/lbp/DS2014_LBP_Pathak.pdf)  
Late breaking paper. Discovery Science 2014
4. **Pathak, Apurva**. *Recognition using SIFT and its Variants on Improved Segmented Iris*. B.Tech. Thesis. 2013. | URL: <http://ethesis.nitrkl.ac.in/5323/1/109CS0171.pdf>  
B. Tech. thesis. Ethesis, NIT Rourkela

## WORK EXPERIENCE

---

Current JULY '13	Software Engineer at MICROSOFT, India Worked as an architect and developer on various projects: Readiness Management System, Build and Packaging tool for Windows SE and Ordering application for Microsoft's partners.
APRIL - JULY '12	Summer Intern at MICROSOFT, India Developed <i>Generic Service Host</i> , a tool that builds and hosts WCF services at runtime. Received pre-placement offer from the Microsoft IT as a result of very positive review.
DEC '11 - JAN '12	Winter Intern at TARAGANA INC., Kolkata, India Developed a CRM mobile application for Symbian, Blackberry and Android that tracks user activities and uploads it into cloud.

## TEACHING EXPERIENCE

---

JULY '11 - APRIL '13	Delivered weekly lectures on C, C++ and Java to the students of NIT Rourkela as a member of <i>Createur club</i> of NIT Rourkela
-------------------------	--

## LANGUAGES

---

ENGLISH:	Fluent
HINDI:	Mothertongue

## TECHNICAL SKILLS

---

Programming Languages:	C, C++, Java, C#, Python, SQL, PL/SQL, R
Engineering Tools:	Matlab, Octave, Weka
Platforms:	Windows, Linux
Other Tools:	Microsoft Office entire suite, $\text{\LaTeX}$ , Netbeans, Eclipse, Visual Studio

## AWARDS AND ACHIEVEMENTS

---

1. First runners up in Conference on Data Sciences 2015 Data Challenge.
2. Acknowledged with *IT Excellence Award* in 2014 at Microsoft.
3. Fellowship for summer research project at IIT Kharagpur in 2011 by IIT Kharagpur.
4. Won 2<sup>nd</sup> prize from the East zone in the 1st round of *Nexus 2011*, an International Robotics Competition organized by IIT Mumbai.
5. Won the 2<sup>nd</sup> prize in *Overnite Coding Competition* in the Tech Fest 2010, NIT Rourkela

6. Won the 2<sup>nd</sup> prize in *Encash Your Code* (programming contest) in 2010 at NIT Rourkela.
7. Secured All India Rank 32 in the first phase of *International Informatics Olympiad* in 2009.

## EXTRA-CURRICULAR ACTIVITIES

---

1. Lead of *Education committee*, in Microsoft for the year 2014.
2. Vice President of *Createur club* of NIT Rourkela between 2011-2013.
3. Member of *Cyborg*, the Robotics club of NIT Rourkela.
4. Volunteered for community services as a member of National Social Services at NIT Rourkela.
5. Coordinated several cultural and technical events at NIT Rourkela.