

**CURRICULUM VITAE****Ravindra Nath**

June-2018

(Experience 20 year as Academic, Administrative Industry and Research)

**Personal Data:**

**Address** : Associate Professor and Head of Department  
Department of Computer Science & Engineering  
University Institute of Engineering & Technology  
CSJM University Kanpur - 208 024

**Home Address** : H – 1676, Avas Vikas No -1, Kalyanpur  
Kanpur UP (India) 208024  
Ph: +91- 8948758999, 7388643788  
rnkatiyar@gmail.com, rnkatiyar@hotmail.com

**Education:**

**Ph.D.** : Computer Science and Engineering, to CSJM University Kanpur, had been completed 2012.  
Topic : Study of Randomized Search Strategy for HMM (Hidden Markov Model) Learning”  
Supervisor : Dr. Renu Jain

**M. Tech.** : Masters of Technology (2002-2004), Information Technology, GGSIP University, Delhi With 73.00%.

**B.E.** : Bachelor of Engineering (1991-1995), Computer Science & Engineering, MMM Government Engineering College, Gorkahpur University, Gorkahpur With 75.00%.

**Current Research Interest:**

- Design and Analysis of Algorithms
- Randomized algorithms and Optimization techniques
- Hidden Markov Model
- Computer Networks and Routing Algorithms
- Computational Algorithms
- String Matching

**Academic Appointments:**

1. Reader (30-June-2009 - Today) CSJM University Kanpur, Department of Computer Science.
2. Senior Lecturer / Lecturer (13-09-2004 - 29-09-2009) CSJM University Kanpur, Department of Computer Science and Engineering.

3. Senior Lecturer (1-11-2001 – 6-09-2004) (AKG Engineering College Ghaziabad) UP Technical University Lucknow, Department of Computer Science.
4. Lecturer (10-02-2001 – 31-10-2001) (SIET Meerut) UP Technical University Lucknow, Department of Computer Science
5. Programmer (18-07-2000 – 30-11-2000) LBS National Academy of Administration, Mussoorie.
6. Lecturer (25-04-1999 – 10-05-2000), Dr. KN Modi Institute Modi Nagar, CCS University Meerut, Department of Computer Science.
7. Research Associate (15-09-1997 – 02-02-1999) Indian Institute of Management Lucknow.

#### **Ph.D Supervised:**

1. Supervisor: Nidhi Katiyar, UPTU Lucknow, Feb 2014.  
Topic : New Drug Candidates against NS5 Methyltransferase Flavivirus family of Dengue Virus with using Hidden Model Approaches.  
Enroll No: ph.D/13/BIOINFO/1271  
Reg Date: 19-Dec-13
2. Supervisor: Noopur Singh, UPTU Lucknow  
Topics: Identification and Prediction of coding regions of DNA using Machine Learning Approaches.
3. Supervisor: Pallavi Singh.  
Topic : A comparative analysis of distribution and conservation of microsatellites to identify unique motifs in sequenced *Candida* species and development of species specific markers.  
Enroll No: ph.D/15/BIOINFO/1746  
Reg Date: 24-june-2015
4. Supervisor: Manish Pal, UPTU Lucknow  
Topics : Study of the HMM (Hidden Markov Model) and its applications in the area of prediction
5. Co-Supervisor : Ms. Mamta Sagar (13PHBIN208), SHIA, technology and Science Allahabad UP India date:11-Feb-2015.  
Topic : Computer Aided Protein Design and Engineering to Enhance Anticancer Property of Flavonoids. [PID NO: 13PHBIN208]
6. Co-Supervisor: Ms. Kalpana (13PHBIN208), UPTU Lucknow  
Date of registration-19 dec-13.  
Enrollment no. -Ph.d/13/Biotech/1250  
Topic : Topic- Design and development of novel antiparasitic agents against *Cryptosporidium parvum* inosine monophosphate dehydrogenase.

#### **Ph.D Thesis Evaluation:**

1. “Secure watermarking Techniques for IPR Protection of Computer Software”,  
Student Name : Yogesh kumar Awsthi Supervisor Name:  
Prof Birendra Kumar Sharma, University: Shobit University Meerut

**Member of editorial board:**

1. International journal of wellness (An annual journal)

**Member of Technical bodies:**

Life time member: Computer Society of India.  
Member ship No: 01152002

**Ongoing consultancy project:** Training and System on CAD/CAM  
Keizen Training Institute Ref NO: KTI/15-15  
Keizencadcam.com

**Research papers published in journals:**

1. **Title** : Character Recognition system for online and offline Handwritten Character

**Author** : Atma Prakash, Ravindra Nath, Santosh Singh

Journal : Royal, Vol.6, Issue.2, Dec-2017 May-2018pp.26-32 -ISSN: 2278-8158

No of pages : 6

Impact factor : 4.42

2. **Title** : Cryptosporidiosis: Challenges for Chemotherapy to AIDS Subpopulation

**Author** : Kalpana<sup>1\*</sup>, R.K. Srivastava<sup>2</sup>, R. Nath<sup>3</sup>, N. Singh

Journal : International Journal of Scientific Research in Computer Science and  
Engineering Vol.5, Issue.2, pp.26-32, April (2017) E-ISSN: 2320-7639

No of pages : 7

Impact factor : 1.638

3. **Title** : Handwritten English Character Recognition using HMM, Baum-  
Welch and Genetic Algorithm

**Author** : Ravindra Nath, Atmaprakash Singh

**Name of Journals:** (IJCSIT) International Journal of Computer Science and Information  
Technologies, Vol. 7 (4), 2016, 1788-1794 ISSN :0975-9646

**Impact factor: 3.32**

**No. of pages** : Seven

**Year** : Sep- 2016

4. **Title** : Methods for Protein Structure Prediction and Its Application in Drug  
Design Using Hidden Markov Model

**Author** : Ravindra Nath, Nidhi katiyar

**Name of Journals:** International Journal of Emerging Trends in Science and Technology  
IJETST- Vol.||03||Issue||03||Pages 3676-3684||March||ISSN 2348-9480

**Impact factor: 2.838**

**No. of pages** : Nine

**Place** : Madhya Pradesh

**Year** : February 2016

5. **Title** : Approximation solution of Traveling Salesman Problem using Dijkstra  
and Bitonic algorithms

**Author** : Ravindra Nath

**Name of Journals:** International Journal of Innovations & Advancement in Computer  
science IJIACS ISSN 2347 – 8616 Volume 5, Issue 2

- No. of pages** : Seven (102-108)  
**Place** : New Delhi  
**Year** : February 2016  
**Impact factor** : 2.65
- 6. Title** : Insulin Chart Prediction for Diabetic Patients Using Hidden Markov Model (HMM) and Simulated Annealing Method  
**Author** : Ravindra Nath and Renu Jain  
**Name of Journals:** Advances in Intelligent Systems and Computing, Series Volume 236, Series ISSN, 2194-5357, Publisher Springer India Copyright Holder Springer India, © Springer International Publishing AG, Part of Springer Science plus Business Media.  
[link.springer.com/content/pdf/10.1007%2F978-81-322-1602-5\\_1.pdf](http://link.springer.com/content/pdf/10.1007%2F978-81-322-1602-5_1.pdf)
- No. of pages** : Six (3-11)  
**Place** : 2014  
**Year** : February 2014
- 7. Title** : Parameter Estimation of Hidden Markov Models (HMM) Using Go with the Winner Algorithms  
**Author** : Ravindra Nath and Renu Jain  
**Name of Journals:** International Journal of Computer Applications (0975 –887), volume 18, No. 5  
**ISSN NO** : 10.5120/2282-2954  
**No. of pages** : Six (11-15)  
**Impact factor** : .814  
**Place** : New Delhi  
**Year** : March 2011
- Research papers published in international conferences:**
- 1. Title** : Approximate Solutions for Shortest Path Queries in Graphs using Voronoi Duals  
**Author** : Ravindra Nath  
**Name of Conference:** International Conference on Optimization,  
**No. of pages** : 6  
**Place** : Center University Rajasthan  
**Year** : Feb 20-22, 2015
- 2. Title** : CpG Sequence Identification Using Hidden Markov Models (HMM) and Randomized Search Algorithms  
**Author** : Ravindra Nath and Renu Jain  
**Name of Conference** International Conference on Computer Science an IT Applications ICSIT-2011  
**No. of pages** : 6  
**Place** : New Delhi  
**Year** : Nov, 2011.  
*Best Research Paper Award*
- 3. Title** : BINARY STRING MATCHING ALGORITHM (BSMA)  
**Author** : Ravindra nath Anil Kumar Yadav,Girish Kumar Singh,  
**Name of Conference:** ICRITO Faridabad  
**No. of pages** : 5  
**Place** : Faridabad  
**Year** : 2010
- 4. Title** : Implementation of Genetic Algorithm to estimate HMM learning parameters  
**Author** : Ravindra Nath and Renu Jain

**Name of Conference:** International Conference on Computational Intelligence Application (ICC IA) 2010

**No. of pages :** 6

**Place :** Nashik

**Year :** 3–5 March 2010

5. **Title :** Using Randomized Search Algorithms to Estimate HMM Learning Parameters

**Author :** Ravindra Nath and Renu Jain

**Name of Conference :** IEEE International Advance Computing Conference (IACC 2009) Patiala

**No. of pages :** 6

**Place :** Patiala India

**Year :** 6–7 March 2009

**Research papers published in national conferences:**

1. **Title :** Routing with High performance Networking

**Author :** Ravindra Nath, Dr. A.P. Singh

**Name of Conference :** Cluster computing Emerging Dimensions

**No. of pages :** 5

**Place :** RSMT Varanasi India

**Year :** October 30-2004

2. **Title :** Network Security in credit card fraud detection system Using Hidden Markov Model

**Author :** Ravindra Nath

**Name of Conference :** National Conference on Internet Security and Cyber Laws (NCISCL 2014)

**No. of pages :** 5

**Place :** HBTI Kanpur India

**Year :** 5<sup>th</sup> to 6<sup>th</sup> -04-2014

**Book Chapter:**

**Title :** Insulin Chart Prediction for Diabetic Patients Using Hidden Markov Model (HMM) and Simulated Annealing Method

**Author :** Ravindra Nath and Renu Jain

**Name of book:** Advances in Intelligent Systems and Computing, Series Volume 2362014, Series ISBN, 9781-81-322-1601-8(print) 9781-81-322-1602-5, (online) Publisher Springer India Copyright Holder Springer India

*link.springer.com/content/pdf/10.1007%2F978-81-322-1602-5\_1.pdf*

**No. of pages :** Six

**Place :** 2014

**Year :** February 2016

**Paper communicated:**

"Cryptosporidiosis; challenges for chemotherapy to AIDS subpopulation "

VirtualCom-16 Conference which is after acceptance will be published in conference souvenir as well as in International journal of computer science on information security.

**FDP attended:**

1. "Advanced Algorithms in Computing", 25-30 Jan -2016, HBTI, Kanpur.

**Workshop/Refresher Course Attended:**

1. IIT Kanpur, "Embedded System Design for internet of Things" from June 30 to 03, 2018

2. IIT Kanpur, "Deep Learning and Computational Intelligence in automation and control" from December 4 to 8, 2017.
3. IIT Kanpur, "International conference on Human value s in Higher Education" from 10 to 12 Feb 2017.
4. IIT Kanpur BHU, QIP Short term Course, "International; Training workshop on fuzzy Logic with application", 20-25, 2017
5. IIT Kanpur," Statistical Analysis for Engineers", 04-08, may 2015.
6. IIT Delhi, Quality improvement Programme, " optimization Methods and Application", 16-19, December 2014
7. HBTI, Kanpur, " National Conference On Internet Security and Cyber Law", 5 to 6-04-2014
8. HBTI, Kanpur, " Modeling Simulation and Analysis of Engineering Sysytems", 25 to 30-June-2013
9. CSJM University Kanpur, four days workshop," Abhiyan aids se bachav ka", from 29-11-2012 to 2-12-2012
10. IIT Kanpur ," Intelligent Informatics System", (17 -21)-Sep-2012
11. IIT Roorkee , " Recent Advances in Genetic Algorithms and their Applications in Engineering Design",25-June-2012 to 29-June-2012
12. IIT Guwahati, QIP programme, Multimedia Communication, Oct- 20-26, 2010.
13. IISc Baagalore, one week workshop,"Introduction to Graph and Geomateric algorithms", July 15-18, 2009
14. NIT Warangal, Data Communications & Networking, (2- 14) -June-2008.
15. FedUni Kanpur, FDP Programme ,8 Oct 2009
16. IIT Guwahati, QIP Programme, " Advanced Wireless Communications ", 22-26 Sep.2008
17. IIT Delhi, FDP Programme," Intellectual Property Rights ",24-28, march,2008
18. UPTU Lucknow, Multi Core Programming, (4- 6) Dec-2007.
19. IIT Kanpur, Program Optimization for Multi-core Architecture, (02- 07) July-2007.
20. UPTU Lucknow, " Intel Multi Core programming for academia", 4-6 Dec-2007
21. IIT Kanpur, "Multicore Architectures", (2-7) July 2007
22. IIT Delhi, " Value Education Through Jeevan vidya", 22-24, May, 2007
23. IIT Delhi, Knowledge Based system and Prolog, 13-06-2005 to 25-06-2005.

**Workshop/Refresher Course Organized:**

1. UIHS CSJM University Kanpur," International Conference On fight Against Cancer", from 5-10-2017 to 7-10-17.
2. HBTI, Kanpur, "Issue and Challenges of Computer Science & Engineering as a

- Discipline”, 09-03-2014.
3. UIET CSJM University Kanpur,” Linux workshop”, 21-04-2014.
  4. UIET CSJM University Kanpur,” C and C++ Workshop”, 11-04-2014.
  5. UIET, CSJM University Kanpur, ”Ethical Hacking workshop” ,12,13-april-2014
  6. CSJM University Kanpur, “Libraries Through Digital Paradigm NCLTDP -2014”, 19-20-04-2014.
  7. CSJM University Kanpur,”International workshop on Biometrics & its application in forensic Science”, 13-15, January 2011.
  8. UPTU Lucknow, FDP Programme, “Human values and professional ethics”, 21-24, May, 2009.
  9. UIET CSJM Univ. Kanpur, National workshop on current trends in Computing & Bioinformatics, 23-02-2007 to 24-2-2007.
  10. LBSNAA Mussoorie, Web administration, 13-10-2000 to 27-10-2000.
  11. IIT Kanpur, International Conference on Human values in Higher Education, 10 -12 Feb, 2017.

**Sports:**

1. MMM Engg. College Gorakhpur, “Annual Sports & Games”, 1994-95 winner, “ Kabaddi”

**Courses Taught:**

- Algorithms
- Computer Languages
- Fundamental of Computer Science
- Computer Network
- Computer Organization
- Neural Network, Fuzzy Logic
- Genetics Algorithm
- Artificial Intelligence
- Cryptography and Network Security
- Multi Core Programming
- Theory of Computation
- Graph Algorithms
- Seminar on genetic analysis
- Seminar in Algorithms
- Seminar in Network Routing Algorithms
- Seminar in Network IPV4 & IPV6

**Departmental/ Institutional Administrative activities and Experience:**

1. Head of department Computer Science and Engineering UIET CSJM university Kanpur from 16-jan- 2017 to 20-05-2017
2. Member of “Yua Mahotsava” at C S J M University Kanpur, 2007
3. Nodal-Officer of mediclaim Policy at CSJM University Kanpur Since 2006
4. Member of CSJM University Convocation Committee since 2013
5. Head of Department Computer Science & Engineering Department from June 2007 to June 2009.

6. Head of Department from 16-jan-2017 to 20-may-2017
7. Warden boys Hostel since 2008 at CSJM University Kanpur.
8. Convener of "Class Monitoring Committee", 2014-2015
9. Deputy Convener of "Examination Committee", 2013-14
10. In charge of Medical claim at CSJM University Kanpur.
11. Convener of Academic advisory committee at UIET CSJM University Kanpur at 2012
12. Convener of Anti ragging committee at UIET CSJM University Kanpur at 2012
13. Convener of Time Table and Calender committee at UIET CSJM University Kanpur
14. Member of Qualification Evaluation at CSJM University Kanpur - 2008
15. Member of B. Ed. Entrance Examination CSJM University Kanpur - 2007
16. Member of B. Tech. Entrance Committee at CSJM University Kanpur
17. Member of B. Ed. Counseling Committee at CSJM University Kanpur
18. In charge / Member of Cultural Committee at CSJM University Kanpur
19. Member of B. Tech. Exam Committee at CSJM University Kanpur observer of B.Ed. Entrance Committee 2012.
20. In charge of Internet and network at LBSNAA Mussoorie.
21. Member of Internet and Network committee at Indian Institute of Management Lucknow.

### **Other Administrative Duties:**

1. As a Observer NET Examination 2017 By CBSE.

### **Recommendation and selected students:**

1. Reference for Mr Kunwar Siddharth, 170759508  
The above student has applied for PhD FT Medical Engineering - Semester 1 start at Queen Mary University of London (QMUL) and has given your details to be contacted about providing a reference for them. We are writing to request a reference from you to support this student's application.
2. ANURADHA AWASTHI is applying to the COMPUTER SCIENCE, PHD program at the University of Waterloo and has chosen you to provide a reference. We know that your time is valuable, and we appreciate your participation in the application process; your recommendation will have a significant impact on the applicant's chance for admission.  
To complete the reference for ANURADHA, please visit the online form:  
<https://strobe.uwaterloo.ca/ist/gradref/reference.php/650769dd1810b937>
3. This message is to confirm that your submission of a letter of recommendation using the UC Irvine Graduate Division's online Letter Of Recommendation system was successful. Thank you for submitting the letter of recommendation on behalf of Vini Gupta for consideration for [F2015] admission to the graduate program in [Computer Science] at UC Irvine, on 12/12/2014. Your time and effort spent on behalf of the student's application is very much appreciated. for this applicant. Following this link is the only way you can securely review, edit or resubmit this applicant's letter of recommendation information online.  
<https://services.adcom.uci.edu/approgress/lor/letterInfo.htm?token=201412011201130CF4E87AE1B9846EED>



**Details of UG project Guide:**

Sno.	Title of project	Institute	Name of the students	Co-	Year
1	using randomized Search Algorithms	UIET, CSJM	Akankha Singh Shweta Singh Twinkle		2014
2	Stock Market prediction using HMM and neural Network	UIET, CSJM	Nishant singh, Sandhya Sonkar Kanchan		2014
3	Study and Implementation of genetic Algorithms	UIET, CSJM	Rohit Gupta, Vaibhav Gupta Vikram Singh		2009
4	Encryption technique using CFB MODE	UIET, CSJM	Neha Gupta Nidhi Dixit Rupal Bajpai		2004
5	Image and vedio Encryption	UIET, CSJM	Kapil Manchanda Roopali Singh Ritesh Ratti		2004
6	Set Protocol(Secure Electronic Transaction)	UIET, CSJM	Nagendra Singh Yugdeep Singh Ajay Kumar		2004
7	Study Implementation and comparision of data security algorithms	UIET, CSJM	Prashant Verma Pradeep Kumar Vikas Kumar		2005
8	Study of Approximation algorithms	UIET, CSJM	Anuradha Mehta Shalini Gupta Dhirendra Kumar Pal		2005
9	Two D to three D image conversion	UIET, CSJM	Prashant bajpai Gaurav Bajpai Ankur Kashyap		2005
10	Study and implementation of Heuristic algorithms on Economic lot	UIET, CSJM	Brijesh Kumar Gupta Ankit Srivastava Vartika Bajpai		2006
11	Common Shared Board for E-learning	UIET, CSJM	Saurabh Yadav Rahul Tomar Gaurav Dwivedi		2007
12	<i>DEVELOPMENT OF MANAGED CODE MINI OPERATING SYSTEM</i>	UIET, CSJM	Ajeet Yadav Mayank Patel Navneet Singh Gangwar		2013
13	Handwritten Character and Word Recognition	UIET, CSJM	Parul Talreja Saumya Dixit Saurabh Talreja		2014
14	Departure scheduling in a multi airport system	UIET, CSJM	Anand Nath shukla Ashwani kumar Manish Kumar		2014
15	Handwritten digit recognition	UIET, CSJM	Akansha Mehta Divya Mehta Apurva sonker		2014

16	Intelligent information system (diet Chart prediction)	UIET, CSJM	Mayuri Gupta Charu Sijoria Anuradha Awasthi		2013
17	TSP problem Using random search techniques	UIET, CSJM	Sameer Patel Sumit Mishra Yogesh Chandra Shukla		2013
18	Time table problem solving using Go with the winner Algorithms	UIET, CSJM	Pushkar Katiyar Shivam Jaiswal Nikhil shukla		2013

**Contact detail:**

1. Dr. Raghuraj Singh, Director, KNIET, Sultanpur, Ph: +91-9721456082, email: rscs@yahoo.com
2. Prof. Brijendra Singh, Professor Computer Application Department, Lucknow University Lucknow UP India , Email : [dr.bsinghlko@gmail.com](mailto:dr.bsinghlko@gmail.com)  
Ph : +91-9936454607
3. Dr. V.K. Sachan, Reader Chemical Engineering Department, UIET, CSJM University Kanpur, ph: +91-8765071743 email: vksachan@iitk.ac.in

(Dr. Ravindra Nath)