# Dr. Rajesh Kumar Maurya

# Academician | Author | Researcher | IT Consultant Ph.D(CS), M.Tech(CSE), M.Phil(IT), MCA, M.Sc(CS), MBA(IS), DMIT, GNIIT

in linkedin.com/in/rajeshkmaurya % www.rajeshmaurya.in ♥ Mumbai, Maharashtra i Indian







An Academician, Author and an Researcher with focus on Machine Learning, Data Analytics, Geo-Computing and Digital forensics. With more than 21+ years of academic experience in teaching at Graduate & Post Graduate Levels, experience in coordinating courses, conducting FDPs, SDPs and workshops, trying best to foster a positive learning ecosystem. Committed to academic integrity and trying to explore futuristic technologies for creating effective learning ecosystem.

# PROFESSIONAL EXPERIENCE

2018-Till Date	Assistant Professor(IT), DEPARTMENT OF INFORMATION TECHNOLOGY, SVKM's Usha Pravin Gandhi College, Mumbai,400056
	Programme Officer-NSS         Syllabus Revision         Workshops         Teaching & Mentoring-M.Sc/B.Sc-IT         Project Guidance         FDP
2016-2018	Assistant Professor & Researcher, University Department of Computer Science(UDCS) , University of Mumbai, Kalina, Mumbai, Maharashtra, 400098
	Teaching & Mentoring-M.Sc(CS)       Project Guide       Workshops       FDP       SDP       Resource Person       Syllabus Revision
2009-2016	Associate Professor & Associate Dean, DES's Navinchandra Mehta Institute of Technology & Development(NMITD), Dadar, Mumbai-400028
	Professor In-charge-MCA Mentoring Project Guide Workshops FDP SDP Resource Person Syllabus Revision
2002-2009	Lecturer & Coordinator-M.Sc. Computer Science & IT, S. K. Somaiya College, Somaiya Vidyavihar, Vidyavihar, Mumbai, India-400077
	[IT Administrator]       Teaching & Mentoring-B.Sc/M.Sc(CS/IT)       Workshops       FDP       SDP       Resource Person       Syllabus Revision
2000-2002	Software Engineer, Dolphin Systems, Mumbai, India-400704
	Server Administration Programming Network

# OTHER EXPERIENCES

2023-2027	Member, Board of Studies (Computer Science) at R. P. Gogate College, Ratnagiri, Raigad
2019-Till date	Member, Board of Studies (Computer Science) at K.C. College, HSNC University, Mumbai
2023-2027	Member, Board of Studies (Computer Science) at Thakur College of Arts, Science & Commerce (Autono-
	mous), Mumbai
2020-Till Date	Coordinator-Nodal Center-IIRS Outreach Programme at Usha Pravin Gandhi College of ASC, Vile Parle(W)
2018-2023	Programme Officer-NSS Unit at Usha Pravin Gandhi College of ASC, Vile Parle(W)
2014-2021	Member, Vidyalaya Management Committee(VMC), Kendriya Vidyalaya, Bhandup
2009-Till date	Consultant, Trainer, Content Development, Star Certification, SYBGEN Learning, Wiley, DreamTech Press
2006-2009	Coordinator – PCP program for IDE for M. Sc(CS)/M. Sc(IT), University of Mumbai
2006-2009	Coordinator, Study Center for Diploma/Degree courses(BCA) affiliated to YCMOU at S. K. Somaiya College,
	Vidyavihar, Mumbai
2004-2009	Counsellor, MBA (MS-07) Program affiliated to IGNOU at Somaiya Vidyavihar, Mumbai
2003-2009	IT Administrator, S.K. Somaiya College, Vidyavihar, Mumbai



- 2023 **Doctor of Philosophy(Ph.D)** in **Computer Science** from University of Mumbai(**Geospatial Analytics**)
- 2013 Master of Business Administration in Information Science (MBA(IS) from Sikkim Manipal University
- 2009 Master of Computer Application (MCA) from Sikkim Manipal University
- 2008 Master of Philosophy in Computer Science(M.Phil-CS) from YCMOU
- 2007 Master of Technology in Computer Science and Engineering-M.Tech(CSE) from J. R. N. Rajasthan Vidyapeeth (Deemed University)
- 2002 Master of Computer Science (M.Sc) in Computer Science from UDCS, UNIVERSITY OF MUMBAI
- 2000 Bachelor of Computer Science(B.Sc) in Physics with Elec Inst from University of Mumbai

# OTHER QUALIFICATIONS

- MH-SET Computer Science & Applications
  UGC-NET Computer Science & Applications
  - GNIIT NIIT Ltd.
  - DMIT Diploma in Management Information Technology

# Publications-Books(International Publishers)

- 2022 Android Programming: Crafting UI/UX using Kotlin, R. K. Maurya, SYBGEN Learning, (in Print)
- 2021 R Programming for Data Analytics & Visualization , R. K. Maurya and S. R. Maurya, SYBGEN Learning, ISBN-10:8195131921, ISBN-13:978-8195131921
- 2020 Programming through Python, M.T. Savaliya, R. K. Maurya, G. M. Magar, Sybgen Learning
- 2018 **LEARNING R: A Language for Data Analytics & Visualization**, S. R. Maurya, R. K. Maurya, Staredu Solutions, ISBN-10:9386765500, ISBN-13:978-9386765505
- 2018 Computer Graphics with Virtual Reality Systems(Third Edition), R. K. Maurya, John Wiley, ISBN-10: 8126576332, ISBN-13: 978-8126576333
- 2018 **Programming through Python**, M.T. Savaliya, R. K. Maurya, G. M. Magar, Staredu Solutions, 2018, ISBN-10: 938676542X, ISBN-13: 978-9386765420
- 2018 Ethical Hacking, Rajesh K. Maurya and Vipul Saluja, Staredu Solutions
- 2016 **Graph Theory & Applications**, S. R. Maurya, R. K. Maurya and G. M. Magar, John Wiley, ISBN-10:8126560622, ISBN-13:978-8126560622
- 2016 Computer Graphics (GTU), R. K. Maurya and S. R. Maurya, John Wiley
- 2015 Computer Graphics, R. K. Maurya, John Wiley, ISBN-10: 8126556358, ISBN-13: 978-8126556359
- 2015 System Programming, GTU Edition, Rajesh Maurya, Wiley-Dreamtech Press
- 2014 Computer Graphics with Virtual Reality Systems (Second Edition), Rajesh Maurya, John Wiley
- 2014 System Programming & Compiler Construction, Rajesh Maurya, Wiley-Dreamtech Press
- 2013 **Software Testing**, R. K. Maurya and S. R. Maurya, Wiley-Dreamtech Press, ISBN-10: 9350044005, ISBN-13: 978-9350044001
- 2012 **Compiler Design**, Rajesh Maurya, Wiley-Dreamtech Press
- 2011 System Programming, Rajesh Maurya, Wiley-Dreamtech Press
- 2009 Computer Graphics with Virtual Reality Systems, Rajesh Maurya, John Wiley

## Publications-Conferences & Journals

- Maurya, R.K., Kulkarni, S.T. and Maurya S.R., "Multidimensional Spatial Analysis of Geo-objects from Un-2021 structured Topographic Points". ITEE, vol. 10, no. 6, December. 2021, issn:2306-708X. (UGC CARE Journal)
- 2021 Maurya, R.K., Kulkarni, S.T. "Multidimensional spatial clustering and visualization of 3D topographic relief data". Int. j. inf. tecnol. 13, 581–592 (2021), doi: 10.1007/s41870-020-00595-6. (Scopus & UGC-CARE 2021)
- 2018 Maurya, Rajesh K., Sushil T. Kulkarni and N. Kalita (2018), "Projection-Based Spatial Morphology for Extracting Ridge and Valley Profiles of Mountains from 3D Amorphous Data", in Proceedings of the 2018 4th International Conference on Computing Communication and Automation (ICCCA), Greater Noida, India, 2018, pp. 1-6, doi: 10.1109/CCAA.2018.8777680. (Scopus)
- 2018 Maurya, Rajesh K. and Sushil T. Kulkarni (2018), "Morphology-Based Extraction of River Network from Multidimensional Topographic LiDAR Returns". In Proceedings of 2018 3rd International Conference for Convergence in Technology (I2CT), Pune, 2018, pp. 1-6, doi: 10.1109/I2CT.2018.8529349 (Scopus)
- Maurya, Rajesh K. and Sushil T. Kulkarni, "A Review of Spatial Analysis of Multidimensional Topographic 2018 Data", International Journal of Computer Engineering and Applications, 2018 11 (12), 253-267 (UGC 2017)
- 2018 Maurya, Rajesh K and Swati R. Maurya, Recognition of a Medieval Indic-'Modi' Script using Empirically Determined Heuristics in Hybrid Feature Space". Maurya, Rajesh K. and Swati R. Maurya (2018). In: International Journal of Computer Sciences and Engineering, VI (II), 2018
- Maurya, Rajesh K. and Sushil T. Kulkarni (2017), "Multidimensional spatial clustering and visualization of 3D 2017 topographic relief data", 11th IEEE INDIACom 4rd International Conference on "Computing For Sustainable Global Development", March 1-3, 2017, New Delhi, 2017
- 2018 R. K. Maurya and S. R. Maurya, "Recognition of a Medieval Indic-'Modi' Script using Empirically Determined Heuristics in Hybrid Feature Space," International Journal of Computer Sciences and Engineering, vol. 7, no. 2, pp. 136-142, 2018. [Online] Available:https://www.ijcseonline.org/pub\_paper/19-IJCSE-02860.pdf

# **SKILLS**

Domain of current Work Machine Learning, Data Science, Digital Security & Forensics, Graphics & Image Processing

Python, R, C/C++, Java, Javascript, CSS Programming Windows Serve R2, Windows-10/11, Linux Operating System

Databases Oracle Database, MySQL, Microsoft SQL Server, SQLite Development Tools & IDE IntelliJ Idea, Visual Studio Code, Android Studio, Jupyter

Web & App Development HTML, Android Data Analytics & Visualization Tools SageMath, Python, R

**Network Administration** Cyberoam & Fortinet based Unified Threat Management System, Win Directory Services

# Ther Academic Roles and Responsibilities

- Subject Expert for Appointment of Assistant Professors for B.Sc Computer Science, K. C College, HSNC 2022 University, Mumbai
- 2022 Subject Expert for Appointment of Assistant Professors for B.Sc Computer Science, SIES, Nerul, Navi
- 2021-22 Member of Syllabus committee of M.Sc(CS), University of Mumbai
- 2020-21 Member of Syllabus committee of B.Sc(CS), University of Mumbai
- 2016-18 Chairperson of Examination -M.Sc Computer Science part-I, University of Mumbai
- 2019-20 Member of Syllabus committee of M.Sc(CS), University of Mumbai
- 2016-18 Member of Syllabus committee of B.Sc(CS), University of Mumbai
- 2012-16 Chairperson of Examination -MCA, University of Mumbai
- 2009-20 Paper setter & Moderator for T.Y.B.Sc Computer Science Examination, University of Mumbai
- 2008-20 Paper setter & Moderator for M.Sc Computer Science Examination, University of Mumbai
- 2010-12 Member of Syllabus committee of B.Sc(CS), University of Mumbai
- 2004-22 Moderator & Paper setter of M. Sc & B.Sc(CS), University of Mumbai Examinations



## REFRESHER & ORIENTATIONS

- June, 2023 Two-week Interdisciplinary Refresher Course on "MOOCS 27.0" organised under the Ministry of Education sponsored Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) scheme organised by TLC Ramanujan College University of Delhi
- March, 2023 Two-week Online Refresher Course on Information and Communication Technology organized by the UGC-Human Resource Development Centre(HRDC), University of Hyderabad, 2023
- Two-week Online UGC SPONSORED Refresher Course on "Machine Learning and Data Science" organi-Dec, 2022 sed by HRDC JNTU Hyderabad
- March, 2022 Fifteen days Online National Refresher course on NATIONAL EDUCATION POLICY & THE TEACHING PE-DAGOGY jointly organized by New Law College, Bharati Vidyapeeth deemed to be University, Pune; Droit Penale Group, Prayagraj and Guru Angad Dev Teaching Learning Centre under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education., Govt of India
  - SWAYAM ARPIT Refresher Programme in Emerging Trends & Technologies in Library & Information Ser-Feb. 2020 vices, conducted by NTA, Ministry of Human Resource Development, Govt of India
  - May, 2020 SWAYAM ARPIT Refresher Programme in Refresher Course on Teacher and Teaching in Higher Education, conducted by NTA, Ministry of Human Resource Development, Govt of India
  - Dec, 2021 One Week Short Term Course on "Artificial Intelligence: Evolution, challenges and opportunities for societal development conducted during" Conducted by UGC Academic Staff College, HRDC Mumbai, University
  - Dec, 2019 One Month Orientation Course Conducted by UGC Academic Staff College, HRDC Mumbai, University of Mumbai



# Resource@Workshops

- 2023 Resource Person for UGC-HRDC Refresher Course in "Artificial Intelligence and Science" under RUSA organised by HRDC, Mumbai University
- 2021 Resource Person for UGC-HRDC Refresher Course on "Robotics and IOT" under RUSA organised HRDC University of Mumbai
- Resource Person for Revised Syllabus for Computer Science (B/Sc and M.Sc), University of Mumbai 2022
- Resource Person for Revised Syllabus for Computer Science (B/Sc and M.Sc), University of Mumbai 2021
- 2020 Resource Person for Four Days Student Development program(SDP) on Python Programming at REVA University, Bangalore, Karnataka
- 2020 Resource Person for Four Days Student Development program(SDP) on Android Programming at REVA University, Bangalore, Karnataka
- 2018 Resource person at Workshop on Revised Syllabus of B.Sc(CS) organized by Ad-hoc Board of Studies in Computer Science, University of Mumbai
- 2017 Resource person at UGC-HRDC Refresher Course on Mathematics organised by HRDC center, University of Mumbai
- 2017 Resource person at Workshop on Revised Syllabus of B.Sc(CS) organized by Ad-hoc Board of Studies in Computer Science, University of Mumbai
- Resource person at Workshop on Revised Syllabus of B.Sc(CS) organized by Ad-hoc Board of Studies in 2016 Computer Science, University of Mumbai
- Resource person at Workshop on Revised Syllabus of B.Sc(CS) organized by Ad-hoc Board of Studies in 2013 Computer Science, University of Mumbai
- 2012 Resource person at Workshop on Revised Syllabus of B.Sc(CS) organized by Ad-hoc Board of Studies in Computer Science, University of Mumbai
- Resource person at Workshop on "Principal of Compiler Design" organized by Ad-hoc Board of Studies 2004 in Computer Science, University of Mumbai

# TRAINING & CERTIFICATIONS

- Two Week FDP on Malware Analysis with Data Science, Organized by Electronics & ICT Academy, IIITDM Jabalpur, MNIT Jaipur and NIT Patna, E&ICT Academy IIITDM Jabalpur Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India
- One Week **FDP on Natural Language Processing under Electronics & ICT**, Academy NIT Patna, Ministry of Electronics and Information Technology (MeitY), Government of India.
- 2021 Online One Week **FDP on "Academic Leadership & Management of Technical Education"** conducted by AICTE Training And Learning (ATAL) Academy, Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be) University, Haridwar
- Online One Week **FDP on "Artificial Intelligence and Machine Learning with Data**, AICTE Training and Learning (ATAL) Academy, Babasaheb Naik College of Engineering
- Online One Week **FDP on "Data Science & Machine Learning with Python"**, AICTE Training and Learning (ATAL) Academy, MANIPAL UNIVERSITY JAIPUR
- One Week Online FDP on Artificial Intelligence and Geospatial Technology in Surveillance Infectious Disease, AICTE Training and Learning (ATAL) Academy, KCG College of Technology
- 2021 Outcome Based Education and CO-PO Mapping organised by S K Somaiya College, IQAC and Exam Cell
- One Week Online **FDP on "Artificial Intelligence"**, AICTE Training And Learning (ATAL) Academy, University College of Engineering & Technology
- One Week Online **FDP on "Machine Vision and Digital Twin"**, AICTE Training And Learning (ATAL) Academy, Sathyabama Institute of Science and Technology
- 2020 One Week **FDP on "Current Trends and Future Technologies in Computing"**, UPG College & University Department of IT, Mumbai University
- One Week FDP on "A Boot Camp on Artificial Intelligence, Machine learning and AI Chat bots", organised by K. C. College and University Department of IT, University of Mumbai
- One Week FDP on **Assessment and Evaluation in Higher Education**, conducted under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), Govt of India
- Three Week "Online Course on Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials, Indian Institute of Remote Sensing (IIRS),ISRO
- One week **course on "Online course on Satellite Photogrammetry and its Application"**, Indian Institute of Remote Sensing (IIRS),ISRO Dehradun
- One week **course on "Remote Sensing and Digital Image Analysis"**, Indian Institute of Remote Sensing (IIRS),ISRO Dehradun
- 2020 One week AICTE Sponsored online Short term Training Programme on "Tableau- Data Visualization Tool for Researchers", IFET college of Engineering
- 2020 Online **FDP on "Cyber Security"**, AICTE Training And Learning (ATAL) Academic, Government Engineering College
- 2020 Online FDP on "Data Sciences", AICTE Training And Learning (ATAL) Academic, IFET COLLEGE OF ENGI-NEERING
- 2020 Online FDP on "Artificial Intelligence", AICTE Training And Learning (ATAL) Academy, IIIT, Naya Raipur
- Online **FDP on "Block Chain"**, AICTE Training And Learning (ATAL) Acdemic, Indian Institute of Information Technology Dharwad
- 2020 Four Day Online Workshop on "Research Writing skills-Workshop Series -01". Galgotias University
- 2015 Two Week FDP on **Understanding Digital Business**, conducted by Vishwakarma Institute of Management, sponsored by AICTE
- 2013 Two-week ISTE workshop, on "Database Management Systems" conducted by IIT Bombay
- Two week workshop on "Introduction to Research Methodology" (conducted by IIT Bombay with support of Ministry Of HRD)
- Three day workshop on "Softcomputing & DSP" conducted by University Department of Computer Science, University of Mumbai
- 2010 Workshop on Syllabus of TY B.Sc(CS) jointly organized by University of Mumbai, held at Kirti College, dadar on 04th May 2010.
- 2009 **Workshop on "Research in Computer Science"**, University Department of Computer Science, University of Mumbai
- Workshop on "Revised Syllabus of T.Y.B.Sc Computer Science" organised by Board of Studies and V. G. Vaze College, Mumbai
- 2005 I.S.T.E approved training program on "Information and System Security: Today and Tomorrow", organised by K. J. Somaiya College of Engineering, Viyavihar, Mumbai

# PROJECTS

#### SPATIAL ANALYSIS & VISUALISATION OF TOPOGRAPHIC DATA

2021

Evaluation, development & visualization methods for spatial analysis of multidimensional topographic data.

Spatial Analysis Visualization Data science

### VIRTUAL MODELS AND IMMERSIVE INTERACTION FOR IMPROVED MULTIMEDIA EXPERIENCE

2011

Hypermedia experience including immersive visualization and auditory experience in an virtual concert environment.

AR/VR Visualization Graphics & Image Processing

## ADAPTIVE TEMPLATE BASED MULTILINGUAL OCR

2009

Designed and developed self learning templates based OCR for multilingual documents witten in English, and Hindi Graphics | DIP | Visualization |

#### 3D Morphing Using Volume Interpolation

2007

Developed a complete framework morphing an object to other using volume based morphing. For performance and fast convergence multidimensional star shaped polyhedral surface approximation was used.

Graphics DIP Visualization

### MACHINE ASSISTED STORY GENERATION USING ADAPTIVE CONTEXTUAL ENCODING

2006

Automatic theme based scripts/story generation for most likely story track with support confidence for given set of props and key events. Also suggests most probable next event with different climax.

NLP Text Generation Al

### OUTREACH AND VOLUNTEERING

Tree Plantation Green Mumbai Initiative (Majhi Vasundhara Abhiyan)
Workshops Professional Workshops for Faculty Development
Literacy Free Seminar and Training during COVID pandemic
Reviewing Reviewing conferences and academic contents

## Professional Memberships

Life Member Computer Society of India(CSI), since May 2013

Life Member IAENG (International Association of Engineers), since Jan 2009
Member Association of Computing Machinery (ACM), since Jan 2007
Life Member Indian Society for Technical Education (ISTE), since Jan 2005



# LANGUAGES PROFICIENCY



- > Committed
- > Rational
- > Motivator
- > Responsible



#### Dr. Varadraj Bapat

English

Marathi

Gujarati

Hindi

Professor, SJMSOM, IIT BOMBAY, MUMBAI-76

@ varadraj@som.iitb.ac.in

### Dr. Jyotsana Dongardive

Head, UDCS, UNIVERSITY OF MUMBAI

@ jyotss.d@gmail.com

#### Dr. G. M. Magar

Head, Department of Computer Science, SNDT Women's University

@ drgmmagar@gmail.com

### Dr. K. V. Kulkarni

Director, DFSL Mumbai, Govt of Maharashtra

@ krishnakulkarni96@yahoo.com