

Mr. Jaypalsing Nathusing Kayte
Doctor of Philosophy,
Senior BSR Researcher at Dr.B.A.M University, Aurangabad,(MH) India
jaypalsing@gmail.com +91-8888880624,



Personal Statement

I have a skills expertise with Image Processing, ImageJ/Fiji, CellProfiler, ArcGIS, ENVI, ERDAS IMAGINE, Fieldspec4 Hyperspectral device, Artificial Intelligence, Deep Learning, Machine Learning, Python with over 6+ years of Total Experience in research and development. I am familiar with the learning process and work hard to adapt to various image processing and machine learning algorithms. I am innovative and adaptable to training and education

Personal Information

Office address: Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India. 431001.
Permanent address: P-Sector, Plot No-13/18, N-7 CIDCO, Aurangabad, Maharashtra, India-431001.
Linkedin profile: <https://www.linkedin.com/in/jaypalsing-kayte-935a522b/>
YouTube Channel: <https://www.youtube.com/c/DoITNew>

Education

2015-2019	Doctor of Philosophy in Computer Science (Computer Vision : Digital Soil Mapping using Remote Sensing and GIS Data) Department of Computer Science and IT, Dr.Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India.
2012-2015	Master of Philosophy in Computer Science (M.Phil.) Dr.Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India.
2010-2012	Master of Business Administration (I.T) Dr.Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India.
2004-2006	Master of Science in Information Technology (M.Sc) Dr.Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India.
2001-2003	Bachelor of Science (B.Sc) Yashwantrao Chavan College of Science Sillod, Aurangabad, Maharashtra, India.
2001	Higher Secondary Education Board (H.S.C 12th) Yashwantrao Chavan College of Science Sillod, Maharashtra
1999	Secondary Education Board (S.S.C 10th) Shivaji Vidyalay Sillod, Maharashtra

Awards and Achievements

1. Online certification on “*Arc-GIS Cartography*” by esri.
2. *Building 3D Cities* using ESRI City Engine.
3. “*C-DAC*” Certification from Mumbai in 2008.

Google Scholar

Cited by | Citations = 22 h-index= 3 and index =0
URL: <https://scholar.google.co.in/citations?user=XQEvAaYAAAAJ&hl=en>

Researchgate

RG Score | **11.65**
URL: | https://www.researchgate.net/profile/Jaypalsing_Kayte

Research Interests

- **Remote Sensing, Geographic Information System, Image Processing, Artificial Intelligence, Machine Learning, Deep Learning, Statistical Modelling and Inference, Big Data Analytic**

ML Programming Skills

Programming Lang | MATLAB, Python, Jupyter notebook, Spyder, RStudio, AWS Cloud.

ML Library Skills

Library | TensorFlow, Torch, PyTorch, Keras, Theano, Pandas, Numpy, Matplotlib.

ML Algorithm Skills

Algorithm | CNN, RNN, LSTM, Backpropagation, Feedforward Neural Network, Logistic Regression, Naive Bayes.

Additional Programing Skills

Programming Lang | C, C++, SQL, PL/SQL, Javascript
Tools : | Android Studio, Photoshop, iMovie

Web design work experience

Programming Lang | JSP, Servlet, HTML, CSS, Java.
Website URL: | <https://www.ruralsouthasia.org>
| <https://www.drratnadeep.in/>
| <https://www.yccsillod.net/>
| <https://gasca.ac.in/>

Research and Development Experience

Sept 2015 to till
date | **Research Assistant**

I am working as a Basic Scientific Research (BSR) Fellow at Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India.

Developing digitize soil map for Aurnagabad District, The Digital Soil Mapping is an advanced technique for mapping soil classes which has been developed to bridge the gap between existing soil maps based on traditional soil survey and the increasing demand for soil information, tools are using for ENVI, ArcGIS, City Engine, with Coding in Python, of various modules/ functions/ features of the Image base virtual assistant

Dec, 2013 to Dec
2014 | **Research Assistant**

I have worked as a Research Assistant in a Master of Philosophy Research Project, on **Analysis of Cardiac MRI to find out Cardiovascular Disease using Automatic Segmentation Techniques** .

Project PI: Dr.Ramesh R. Manza, Department of CS & IT, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India.

Publications

Journals

1. Tejas U. Padghan, Ratnadeep R. Deshmukh, **Jaypalsing N. Kayte***, Anita G. Khandizod, Pooja V. Janse “**Prediction of Salt in Soil by PLS Regression Using Hyperspectral Laboratory Data**” International Journal of Computer Sciences and Engineering (JCSE) E-ISSN: 2347-2693 Vol.-7, Issue-2, Feb 2019, PP. 172-175.
2. Akshay V. Kshirsagar, Ratnadeep R. Deshmukh, Pooja V. Janse, Rohit Gupta, **Jaypalsing N. Kayte***, Ratnadeep R. Deshmukh. “**Detection of disease from Chilly Plant Using Vegetation Indices**” International Journal of Computer Sciences and Engineering (JCSE) E-ISSN: 2347-2693 Vol.-7, Issue-1, Jan 2019. PP. 333-337
3. Swati B. Magare, Dr. Ratnadeep R. Deshmukh, **Jaypalsing N. Kayte**, Rohit S. Gupta, Rohinee Misal “**To Study the Effects of Diseases on Plants Using Hyperspectral Data**” International Journal of Science, Engineering and Management (IJSEM), ISSN (Online) 2456 -1304, Vol 3, Issue 2, February 2018 PP.132-137
4. **Jaypalsing N. Kayte**, Kanchan Sukhdev Kayande, Pooja Vinod Janse, Ratnadeep R. Deshmukh. “**Hyper spectral Analysis of Soil Iron Oxide using PLSR Method: A Review**” International Journal on Future Revolution in Computer Science Communication Engineering ISSN: 2454-4248, Volume: 4 Issue: 2 337 341
5. **Jaypalsing N. Kayte**, Tejas U. Padghan, Ratnadeep R. Deshmukh, Pooja V. Janse “**Hyperspectral Estimation of Soil Salt Content Using Partial Least Square Regression Method: A Review**” Journal of Environmental Science, Computer Science and Engineering Technology (JECET), E-ISSN: 2278179X, March 2018- May 2018; Sec. A; Vol.7. No.2, 156-161.
6. **Jaypalsing N. Kayte**, Priyanka U. Randive, Ratnadeep R. Deshmukh, Pooja Vinod Janse, “**Study of detecting Plant diseases using Non-Destructive Methods: A Review**” International Journal of Emerging Trends Technology in Computer Science (IJETTCS), Volume 7, Issue 1, January-February 2018 ISSN 2278-6856,
7. **Jaypalsing N. Kayte**, Rohit S. Gupta, Ratnadeep R. Deshmukh, Priyanka U. Randive, Akshay V. Kshirsagar, “**Study of Pharmaceutical Solid dosage forms using Invasive and Non Invasive Techniques: A Review**”, Journal of Environmental Science, Computer Science and Engineering Technology (JECET), E-ISSN: 2278179X June 2018 - August 2018; Sec. B; Vol.7. No.3, 321-327
8. **Jaypalsing N. Kayte**, Akshay V. Kshirsagar, Ratnadeep R. Deshmukh, Pooja V. Janse, Rashmi Agarwal “**Comparative Study of the Techniques Used For Detecting the Diseases of Plant Using Vegetation Indices**” Journal of Environmental Science, Computer Science and Engineering Technology (JECET), E-ISSN: 2278179X, June 2018 - August 2018; Sec. B; Vol.7. No.3, 269-276.
9. **Jaypalsing N. Kayte**, Suvarnsing G. Bhable “**Oceanography and Climate Change using Remote Sensing and GIS**” International Journal of Remote Sensing Geoscience (IJRSG), ISSN No: 2319-3484 Volume 5, Issue 1, Jan. 2016, PP-24-29
10. **Jaypalsing N. Kayte**, Suvarnsing G. Bhable “**Introduction to Mail Management System**” Int. Journal of Engineering Research and Applications, ISSN: 2248-9622, Vol. 6, Issue 1, (Part - 5) January 2016, pp.94-97
11. **Jaypalsing N. Kayte**, “**Analysis of Cardiac Mri To Find Out Cardiovascular Disease Using Automatic Segmentation Techniques**” IOSR Journal of VLSI and Signal Processing (IOSR-JVSP), Volume 5, Issue 6, Ver. II (Nov -Dec. 2015), PP 81-90, e-ISSN: 2319 4200, p-ISSN No. : 2319 4197
12. **Jaypalsing N. Kayte**, Manza Ramesh Raybhan “**Left Ventricle Statistical Models Segmentation of Shape and Appearance for Analysis of Cardiac MRI**” International Journal of Computer Applications (0975 8887) Volume 104 No.7, October 2014
13. **Jaypalsing N. Kayte**, R. R. Manza “**ANALYSIS OF 4D SHORT AXIS CARDIAC MRI**”, Indian Streams Research Journal, ISSN:-2230-7850

International Conference

1. Omeer A.A., Deshmukh R.R., Gupta R.S., **Kayte J.N.**, (2019) “**Land Use and Cover Mapping Using SVM and MLC Classifiers: A Case Study of Aurangabad City, Maharashtra, India.**” In: Santosh K., Hegadi R. (eds) Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2018. Communications in Computer and Information Science, vol 1037. Springer, Singapore

2. Janse P.V., Deshmukh R.R., **Kayte J.N.**, Randive P.U. (2019) **“Estimation of Crop Chlorophyll Content by Spectral Indices Using Hyperspectral Non-imaging Data.”**In: Santosh K., Hegadi R. (eds) Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2018. Communications in Computer and Information Science, vol 1037. Springer, Singapore
3. Pooja Vinod Janse ; **Jaypalsing N. Kayte** ; Rashmi V. Agrawal ; Ratnadeep R. Deshmukh, Date of Conference: 20-22 Dec. 2018 **“Standard Spectral Reflectance Measurements for ASD FieldSpec Spectroradiometer”**In: 2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC), Conference Location: Solan Himachal Pradesh, India . Publisher: IEEE, INSPEC Accession Number: 18792219
4. **Jaypalsing N. Kayte**, R. R. Deshmukh, Stephen G.Karungaru, N. V. Kalyankar **“Review of Digital Soil Mapping Procedures”** Cognitive Knowledge Engineering, Aurangabad, India. December 2016
5. **Jaypalsing N. Kayte**, swapnil d. Waghmare Rashmivijay agrawal,anita G. Khandizod, Ratnadeep R. deshmukh **“Prediction of soil attributes in Digital Soil Mapping”** social Research Foundation, ISSN-2321-211X, iic-desW 2017 special issue:Volume No. i, pp. 251-258

National Conference

1. **Jaypalsing N. Kayte**, Ratnadeep R. Deshmukh. **“Digital Soil Mapping of Aurangabad District, Maharashtra, India, using Remote Sensing and GIS Technologies”** Published by NRSC-ISRO, February 26-27 2020, UIM2020 Balanagar, Hyderabad,TS, India
2. Abdulla A. Omeer, Ratnadeep R. Deshmukh, Rohit S. Gupta and **Jaypalsing N. Kayte**. **“Temporal Mapping of Land Use Land Cover using SVM and MLC Classifiers: A Case Study of Aurangabad city, Maharashtra ”** Published by NRSC-ISRO, February 26-27 2020, UIM2020 Balanagar, Hyderabad,TS, India
3. **Jaypalsing N. Kayte**, Ratnadeep R. Deshmukh. **“Building Spectral Library of Soil Samples using Spectroscopic Device and ENVI Software”** Published by IJRAR, January 2019, Volume 6, Issue 1, pp.391-395.

Books

1. **Jaypalsing N. Kayte**, Dr. Ratnadeep R. Deshmukh, Dr. Charansing N. Kayte **“Analysis of Cardiac MRI to recognize Cardiovascular disease by AST”** Publisher: Scholar’s Press, International Book Market Service Ltd., Member of OmniScriptum Publishing Group, 17 Meldrum Street, Beau Bassin 71504, Mauritius, ISBN: 978-613-8-82748-1
2. **Jaypalsing N. Kayte**, Dr. Sangramsing N. Kayte, Dr. Charansing N. Kayte **“Non-Proliferative Diabetic Retinopathy Detection by Digital R-Images”** Publisher: Scholar’s Press, International Book Market Service Ltd., Member of OmniScriptum Publishing Group, 17 Meldrum Street, Beau Bassin 71504, Mauritius,ISBN: 978-613-8-82748-1

Conference and Workshop Participated

Conferences:

- Attended Three Days Workshop on ”Exploring ENVI”, Organized by Department of Computer Science and IT, Dr. B.A.M. University,Aurnagabad May 15rdto17th, 2018.
- Participated in International Conference on ISC 106th Indian Science Congress (ISCA) held at Lovely Professional University, Phagwara, Jalandhar ,Panjab, during Jan 3rdto7th, 2019.
- Participated in International Conference on ISC 99th Indian Science Congress,Bhubaneswar,Odisha, during Jan 3rdto7th, 2012.
- Participated in International Conference on Knowledge Engineering organized by Department of computer science and IT, Dr.B.A. Marathwada University, Aurangabad, during 29-31 Jan 2011.

Workshops:

- NRSC User Interaction Workshop, 22-23, Jan 2019.
- Participated of Two Day UGC-SAP Nation Seminar on Materials Science, X-ray and Gamma Ray Spectroscopies at organized by Department of Physics, Dr.B.A. Marathwada University, Aurangabad March 29-30-2017.
- Participated of One Day Workshop on LaTeX at organized by Department of CS and IT, Dr.B.A. Marathwada University, Aurangabad, during 25th June 2016.
- Participated of four Day Workshop on Endress + Hauser Technical Training, at organized by Department of CS and IT, Dr.B.A. Marathwada University, Aurangabad 8th to 12th July 2013.
- Participated of One Day Workshop on Integrating Geospatial Technology with e-Governance of an Indian District at organized by Depart of CS and IT, Dr.B.A. Marathwada University, Aurangabad, during 19th January 2013
- Workshop on Embedded Systems and its Application at organized by Dept. of CS and IT, Dr.B.A. Marathwada University, Aurangabad
- Participated in National Workshop of Data Mining and data Warehousing at organized by Dr.B.A. Marathwada University, Aurangabad.
- Participated in One-Day Workshop on Embedded System and Robotics, 7th March 2009 at Dr.B.A. Marathwada University Aurangabad.

Professional Membership

- Institute of Electrical and Electronics Engineers (IEEE) (Membership no 94954265)

Voluntary Activities

- Local Organizer Head volunteer, University Level Avishkar organized by Dr.B.A. Marathwada University, Aurangabad, during Dec 2014, Dec 2015, Dec 2016.
- Four Day Workshop on Endress + Hauser Technical Training, organized by Department of CS and IT, Dr.B.A. Marathwada University, Aurangabad 8th to 12th July 2013.
- One Day Workshop on "LaTeX" organized by Department of CS and IT, Dr.B.A. Marathwada University, Aurangabad, during 25th June 2016.

Hobbies & Interests

- My hobbies include theories of the self and close relationships.
- In my free time, I enjoy spending time with my friends, photography, exploring urban areas, enjoying a good mystery book or film noir, and doing puzzles.

References

- References 1: **Prof. Ratnadeep R. Deshmukh**
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Mobile No: +91-9423147466, Email ID: -rrdeshmukh.csit@bamu.ac.in
- References 2: **Prof. Bharti W. Gawali**
ex.Head of Department,
Department of Computer Science and Information Technology Dr. Babasaheb Ambed-
kar Marathwada University, Aurangabad, India-431004,
Mobile No: +91-9404012032, Email ID: -drbhartiokade@gmail.com
- References 3: **Dr. Charansing K. Kayte**
Head and Assistant professor at Dept of Digital and Cyber Forensic,
Government Institute Of Forensic Science Aurangabad, India- 431004,
Mobile No: +91-9423451303, Email ID: - charankayte@gmail.com
- References 4: **Prof. Sachin Deshmukh**
Head of Department,
Department of Computer Science and Information Technology Dr. Babasaheb Ambed-
kar Marathwada University, Aurangabad, India-431004,
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Declaration

The above information is correct to the best of my knowledge.

Jaypalsing N.Kayte

October 16, 2020