

Curriculum Vitae

Dr. Shwet Ketu

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Educational Details

- Doctor of Philosophy (Ph.D.) in Information Technology with 80.80% (Coursework examination) from Department of Computer Science, Banaras Hindu University, Varanasi, India, June 2021.
- Master of Technology (M.Tech.) in Information Technology (Specialization in Software Engineering) with 8.82 CGPA from Department of Information Technology, Indian Institute of Information Technology Allahabad, Allahabad, India, June 2015.
- Bachelor of Technology (B.Tech.) with 71.42% in Computer Science & Engineering from B.B.S. College of Engineering and Technology, Allahabad, India, June 2012.
- Intermediate (XII) (U.P Board) with 64.00% from Government Intermediate College in June 2008.
- High School (X) (U.P Board) with 62.00% from Government Intermediate College in June 2006.

Work Experience

- Assistant Professor at Department of Computer Science & Engineering, Shambhunath Institute of Engineering and Technology, Allahabad, India from 01 March, 2021 to Till Date.
- Assistant Professor at Department of Computer Science & Engineering, Department of Computer Science & Engineering in Institute of Engineering and Rural Technology, Allahabad, India from 01 July, 2015 to 2 March, 2017.

Research Interests

- Internet of Things (IoT)
- Internet of Healthcare Things (IoHT)
- Cyber Physical System
- Smart Healthcare Data Analytics
- Big Data Analytics
- Machine Learning

- Stream Data Analytics

Membership of Professional Bodies

- Member (M- 96126425), Institute of Electrical and Electronics Engineers (IEEE).

Achievements \ Extracurricular Activities

- Active member of student organizing committee in “IEEE CIS Summer School 2019 on Big Data Analytics and Stream Processing: Tools, Techniques and Application” held in ‘Indian Institute of Information Technology, Allahabad’.
- Awarded with ‘Best Project Award’ for the project ‘Smart Dustbin’ in “Two Week Summer School on Intelligent Internet of Things (IIoT)” held in ‘Jaypee Institute of Information Technology, Noida’.
- Event Coordinator of “Symposium cum workshop on IT Innovations for Smart City & Research colloquium in Information Technology (IIITA ACM-W Chapter)” held in ‘Indian Institute of Information Technology, Allahabad’.
- A+ certification in ‘Linux Administration Course’ from ‘Hewlett Packard’.
- Achieve 2nd prize in college level Innovation competition ‘Blue Eyes Technology’.
- Given Seminar at ‘MNNIT Allahabad’ on ‘Train Controlling Via GPS Technology’.
- Achieved ‘Ekikrit Chatravriti Scholarship’ at state level.
- As ‘Coordinator’ in college technical events.
- ‘Event organizer’ in all school and college annual day functions and other technical events.
- Participated in college and school level ‘Technical Event’ and essay competition and received applauds.

Technical Proficiency

- **Languages Known:** C, Python
- **Frameworks:** Apache Hadoop, Apache Spark, Apache Flink, MapReduce
- **Operating System:** LINUX, WINDOWS, Red Hat Administration
- **Awareness:** Internet of Things (IoT), Internet of Healthcare Things (IoHT), Cyber Physical System, Smart Healthcare Data Analytics, Machine Learning, Big Data & Big Data Analysis (Big Data Clustering), Stream Data Analysis

Credentials

- Highly motivated and eager to learn new things.

- Strong motivational and leadership skills.
- Ability to produce best result in pressure situation.
- Ability to work as individual as well as in group.
- Comprehensive problem solving abilities by exploring the things.
- Active, self-motivated and flexible.

Workshops / Training Attended

- Undergone AICTE MARGDARSHAN of One Week Faculty Development Programme on “OUTCOME BASED EDUCATION IN PERSPECTIVE TO NEW EDUCATION POLICY”, organized by the Bhilai Institute of Technology, Durg in 2021.
- Undergone one week Faculty Development Program (FDP) in an ONLINE mode on “Internet of Things (Applications in Medical Science)”, organized by the Department of Computer Science and Engineering at WOMEN ENGINEERING COLLEGE AJMER in 2021.
- Undergone one week Faculty Development Program (FDP) in an ONLINE mode on “Deep Learning for Audio and Speech Processing”, organized by the Department of Electrical & Computer Engineering at KLE Technological University in 2021.
- Undergone one week Faculty Development Program (FDP) in an ONLINE mode on “Research Methodology and IPR”, organized by the Department of Computer Science and Engineering at Sagar Group of Institution in 2021.
- Undergone GUJCOST-sponsored one-week International Short Term Training Programme (STTP) in an ONLINE mode on “Blockchain Technology, Research Avenues, and its applications”, organized by the Department of Computer Science and Engineering at Nirma University in 2021.
- Undergone 5-day AICTE-sponsored online Short Term Training Program (STTP) on "Artificial Intelligence and its Societal Applications", organized by the Department of Computer Science and Engineering at NIT Meghalaya in 2021.
- Undergone 5-day AICTE-sponsored online Short Term Training Program (STTP) on "Security in Decentralized Systems and Smart Contracts", organized by the Department of Computer Science and Engineering at NIT Meghalaya in 2021.
- Undergone One Week AICTE sponsored online FDP on “Trends for Industry 4.0 Beyond 2020 |Electronics Engineering Perspective” organized by J.C. Bose University of Science and Technology, YMCA, Faridabad, Haryana in 2021.
- Undergone TEQIP-III sponsored One Week online Short Term Training Program (STTP) on “Artificial Intelligence and Machine Learning” organized by the Department of Computer Science at Government Engineering College, Banswara, Rajasthan, in 2021.

- Undergone One Week AICTE sponsored online Short Term Training Program (STTP) on “21 Century Emerging Trends in Research and Paradigm Shift in business practices” organized by Meerut Institute of Engineering & Technology, in 2021.
- Undergone AICTE Sponsored One Week Short Term Training Program on “Advance Technique in Research and Data Analytical Tools by using SPSS and Eviews” organized by Meerut Institute of Engineering & Technology, in 2020.
- Undergone Five Days Online Workshop on "Emerging IT Technologies" organized by Department of Computer Science and Engineering, Motilal Nehru National Institute of Technology, Allahabad in 2020.
- Undergone 11 Days Online Workshop on “Emerging Trends and Future Computing Technologies” organized by Department of Computer Science & Technology, Bodoland University, Assam in 2020.
- Undergone One Day Online National Workshop on “Writing Research Paper & Grant Proposal” organized by Department of Computer Science, South East Manipur College, Komlathabi, Chandel, Manipur in 2020.
- Undergone Two Days National Workshop on “Interview Skills” organized by Centre for Training and Placement, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, in 2020.
- Undergone One Week Online Training Program on “ICT Tools for Teaching, Learning and Administration” Organized by Department of Electronics and Communication, J. K. Institute of Applied Physics & Technology, Prayagraj, in 2020.
- Undergone One Day Online Workshop on “LaTeX for Technical Writing and Presentation” organized by IEEE, in 2020.
- Undergone Five Days E-FDP on “Enhancement of New Learning Tools in Management Education Through Case Studies” organized by Meerut Institute of Engineering & Technology, in 2020.
- Undergone One Day Online Webinar on “Cyber Crime and Security: Threats and Challenges” organized by Shaheed Bhagat Singh Evening College, Delhi, in 2020.
- Undergone One Day Online Webinar on “Post COVID-19 Role of Science and Technology towards a Self-Reliant India” organized by IEEE India Council, in 2020.
- Undergone One Day Online Webinar on “Innovation: What, Why and How?” organized by IEEE Bangalore Section and IEEE India Council, in 2020.
- Undergone One Day Online Webinar on “Art and Challenges of Writing Papers for IEEE Transactions” organized by IEEE Bangalore Section, in 2020.
- Undergone IEEE CIS Summer School 2019 on “Big Data Analytics and Stream Processing: Tools, Techniques and Application” at Indian Institute of Information Technology, Allahabad in 2019.

- Undergone Two Week Summer School on “Intelligent Internet of Things (IIoT)” at Jaypee Institute of Information Technology, Noida in 2019.
- Undergone TEQIP-III sponsored one week Faculty Development Program on “Machine Learning for Pattern Recognition (MLPR-2019)” at Delhi Technological University, Delhi in 2019.
- Undergone GIAN (Global Initiative of Academic Networks) course and certification on “Parallel and Distributed Data Stream Mining” by Prof. Srikanta Tirthapura, Iowa State University, USA at Indian Institute of Information Technology Allahabad in 2017.
- Undergone Q.I.P. short term course and certification on “Computational Biology and Neuroscience” at Indian Information of Technology (BHU) Varanasi in 2016.
- Undergone three months of Training & certification at ‘IIIT ALLAHABAD’ on ‘Linux Administration’ from ‘Hewlett Packard’ in 2011.

Publications

- **Shwet Ketu**, Pramod Kumar Mishra, " India perspective: CNN-LSTM hybrid deep learning model-based COVID-19 prediction and current status of medical resource availability", in Soft Computing, Springer, 2021. <https://doi.org/10.1007/s00500-021-06490-x> (SCI Indexed) IF: **3.642**
- **Shwet Ketu**, Pramod Kumar Mishra, "Internet of Healthcare Things: A Contemporary Survey", in Journal of Network and Computer Applications, Elsevier, 2021. <https://doi.org/10.1016/j.jnca.2021.103179> (SCI Indexed) IF: **6.281**
- **Shwet Ketu**, Pramod Kumar Mishra, " Empirical Analysis of Machine Learning Algorithms on Imbalance Electrocardiogram Based Arrhythmia Dataset for Heart Disease Detection", in Arabian Journal for Science and Engineering, Springer, 2021. <https://doi.org/10.1007/s13369-021-05972-2> (SCI Indexed) IF: **2.334**
- **Shwet Ketu**, Pramod Kumar Mishra, "Scalable kernel Based SVM Classification Algorithm on Imbalance Air Quality Data for Proficient Healthcare", in Complex & Intelligent Systems, Springer, 2021. <https://doi.org/10.1007/s40747-021-00435-5> (SCI Indexed) IF: **4.927**
- **Shwet Ketu**, Pramod Kumar Mishra, “Hybrid Classification Model for Eye State Detection in Stroke Patients Using Electroencephalogram Signals”, in Cognitive Neurodynamics, Springer, 2021. DOI: <https://doi.org/10.1007/s11571-021-09678-x> (SCI Indexed) IF: **5.082**
- **Shwet Ketu**, Pramod Kumar Mishra, “Cloud, Fog and Mist Computing in IoT: An Indication of Emerging Opportunities”, in IETE Technical Reviews, Taylor and Francis, 2021. DOI: <https://doi.org/10.1080/02564602.2021.1898482> (SCI Indexed) IF: **2.200**
- **Shwet Ketu**, Pramod Kumar Mishra, “A Hybrid Deep Learning Model for COVID-19 Prediction and Current Status of Clinical Trials Worldwide”, in Computers, Materials & Continua, Tech Science, 2020. DOI: <https://doi.org/10.32604/cmc.2020.012423> (SCI Indexed) IF: **3.772**
- **Shwet Ketu**, Pramod Kumar Mishra, “Enhanced Gaussian process regression-based forecasting model for COVID-19 outbreak and significance of IoT for its detection”, in Applied

Intelligence, Springer, 2020. DOI: <https://doi.org/10.1007/s10489-020-01889-9> (SCI Indexed) IF: 5.086

- **Shwet Ketu**, Pramod Kumar Mishra, and Sonali Agarwal, "Performance Analysis of Distributed Computing Frameworks for Big Data Analytic: Hadoop Vs Spark", in Computación y Sistemas. DOI: <https://doi.org/10.13053/CyS-24-2-3401> (Scopus Indexed)
- **Shwet Ketu**, Pramod Kumar Mishra, "Performance Analysis of Machine Learning Algorithms for IoT Based Human Activity Recognition" in Lecture Notes in Electrical Engineering, Springer (ICAECT 2019 Conference). DOI: https://doi.org/10.1007/978-981-15-5558-9_51 (Scopus Indexed)
- **Shwet Ketu**, Kanderp Narayan Mishra, and Somya Jaiawal, "Survey on Object Oriented Metrics Tools" a Chapter in McGraw-Hill (RICE 2016 Conference).
- **Shwet Ketu**, Sonali Agarwal, "Performance Enhancement of Distributed K-Means Clustering for Big Data Analytics Through In-memory Computation" in IEEE (IC3 2015 Conference). DOI: <https://doi.org/10.1109/IC3.2015.7346700>
- **Shwet Ketu**, Bakshi Rohit Prasad, and Sonali Agarwal, "Effect of Corpus Size Selection on Performance of Map-Reduce Based Distributed K- Means for Big Textual Data" in ACM (ICCC 2015 Conference). DOI: <https://doi.org/10.1145/2818567.2818653>

Personal Details

Father's Name	: Mr. Shesh Nath Pandey
Date of Birth	: 2 nd October, 1992
Gender	: Male
Marital Status	: Unmarried
Languages Known	: English and Hindi
Nationality	: Indian
Hobbies	: Singing, Playing Cricket.
Permanent Address	: 396 C Chandpur Salori, Teliyarganj, Prayagraj, Uttar Pradesh- 211004, India

References

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- Dr. Sonali Agarwal, Associate Professor, Department of Information Technology, Indian Institute of Information Technology Allahabad, Allahabad, Uttar Pradesh- 211012 India, Phone: +91-9415647042, Email: sonali@iiita.ac.in

Declaration

I hereby declare that all the information given by me is correct to the best of my knowledge.

Date:

Place:

Shwet Ketu