

Dr. Koteswar Rao JERRIPOTHULA, Assistant Professor, IIT Kanpur

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| CONTACT | Address: #302, ACES Building, IIT Kanpur, Kanpur, Uttar Pradesh, India - 208016. Telephone: +91 512 259 2483 Email: kotesrj@iitk.ac.in Weblinks: Website , LinkedIn , Google Scholar , dblp , Scopus , WoS & IEEE Xplore |
| INTERESTS | Computer Vision Multimedia AI/ML |
| EXPERIENCE | Indian Institute of Technology (IIT) Kanpur , India, Jan. 2024 - Present Assistant Professor (Grade-I), EE Department IIIT-Delhi , India, Feb. 2020 - Jan. 2024 Assistant Professor (Tenure-track), CSE Department Graphic Era , India, Sep. 2017 - Aug. 2019 Assistant Professor, CSE Department Advanced Digital Sciences Center (ADSC) , Singapore, July 2016 - Nov. 2016 Junior Research Assistant, Visual Modeling & Analytics Team Lenskart Solutions Pvt. Ltd. , India, June 2012 - July 2013 Software Developer, TechOps Team |
| EDUCATION | Nanyang Technological University (NTU) , Singapore, Aug. 2013 - Aug. 2017 PhD, Interdisciplinary Graduate School <ul style="list-style-type: none">• <i>Advisors:</i> Jianfei Cai & Junsong Yuan• <i>Thesis:</i> Co-saliency Based Visual Object Co-segmentation & Co-localization• <i>Publications:</i> 6 (incl. CVPR, ECCV & TMM) Indian Institute of Technology (IIT) Roorkee , India, Aug. 2008 - May 2012 BTech, Department of Electrical Engineering <ul style="list-style-type: none">• <i>Advisor:</i> Maheshwari, R. P.• <i>Thesis:</i> Image Segmentation using Advanced Fuzzy c-means Algorithm• <i>Thesis Grade:</i> A+ (topmost grade) Mahathi Junior College , India, Apr. 2006 - July 2008 MPC group, Intermediate (Classes XI-XII) <ul style="list-style-type: none">• <i>Board:</i> Andhra Pradesh Board of Intermediate Education (APBIE)• <i>Qualified:</i> IIT-JEE (AIR-1221), BITSAT and AIEEE Kendriya Vidyalaya , India, Apr. 1996 - Mar. 2006 English medium, School (Classes I-X) <ul style="list-style-type: none">• <i>Board:</i> Central Board of Secondary Education (CBSE)• <i>Qualified:</i> KVS-JMO (AIR-35) |
| CITATION RECORD | 565+ Citations (h-index: 13) on Google Scholar 435+ Citations (h-index: 11) on Scopus 370+ Citations (h-index: 09) on Web of Science |

TIER-ONE (Q1)
JOURNAL
ARTICLES

- [J6] K. R. Jerripothula, P. Mukherjee, J. Cai, S. Lu, and J. Yuan, “AppFuse: An Appearance Fusion Framework for Saliency Cues,” *IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)*, 2022. [JCR Q1]
- [J5] K. R. Jerripothula, J. Cai, J. Lu, and J. Yuan, “Image Co-skeletonization via Co-segmentation,” *IEEE Transactions on Image Processing (TIP)*, 2021. [JCR Q1]
- [J4] K. R. Jerripothula, A. Rai[†], K. Garg[†], and Y. S. Rautela[†], “Feature-level Rating System using Customer Reviews and Review Votes,” *IEEE Transactions on Computational Social Systems (TCSS)*, 2020. [JCR Q1]
- [J3] K. R. Jerripothula, J. Cai, and J. Yuan, “Efficient Video Object Co-localization with Co-saliency Activated Tracklets,” *IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)*, 2019. [JCR Q1]
- [J2] K. R. Jerripothula, J. Cai, and J. Yuan, “Quality-guided Fusion-based Co-saliency Estimation for Image Co-segmentation and Co-localization,” *IEEE Transactions on Multimedia (TMM)*, 2018. [JCR Q1]
- [J1] K. R. Jerripothula, J. Cai, and J. Yuan, “Image Co-segmentation via Saliency Co-fusion,” *IEEE Transactions on Multimedia (TMM)*, 2016. [JCR Q1]

TOP-TIER (A*/A)
CONFERENCE /
PROCEEDINGS
PAPERS

- [A6] A. Gupta[†], K. R. Jerripothula, and T. Tillo, “CIRCOD: Co-saliency Inspired Referring Camouflaged Object Discovery,” *IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)*, 2025. [CORE A]
- [A5] S. Yadav[†] and K. R. Jerripothula, “FCCNs: Fully Complex-valued Convolutional Networks using Complex-valued Color Model and Loss Function,” *IEEE/CVF International Conference on Computer Vision (ICCV)*, 2023. [CORE A*]
- [A4] S. Jain[†] and K. R. Jerripothula, “Federated Learning for Commercial Image Sources,” *IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)*, 2023. [CORE A]
- [A3] K. R. Jerripothula and P. Mukherjee, “ASOC: Adaptive Self-aware Object Co-localization,” *IEEE International Conference on Multimedia and Expo (ICME)*, 2021. [CORE A]
- [A2] K. R. Jerripothula, J. Cai, J. Lu, and J. Yuan, “Object Co-skeletonization with Co-segmentation,” *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2017. [CORE A*]
- [A1] K. R. Jerripothula, J. Cai, and J. Yuan, “CATS: Co-saliency Activated Tracklet Selection for Video Co-localization,” *European Conference on Computer Vision (ECCV)*, 2016. [CORE A*]

OTHER
CONFERENCE /
PROCEEDINGS
PAPERS

- [C14] M. Kumar, A. Sharma, P. Mukherjee, and K. R. Jerripothula, “CMAEH: Contrastive masked autoencoder based hashing for efficient image retrieval,” *International Conference on Pattern Recognition (ICPR)*, 2024. [GGS A-] [Cite Score: 3.7]

[†] indicates my student.

NOTE-1: Top-tier (A*/A) conferences are considered Journal-equivalent. See pages 3 & 24 of this [online document](#) for IITB EE department’s specific eligibility criteria for faculty recruitment.

NOTE-2: As per Google Scholar Metrics, many conferences rank among the top 10 venues in Computer Vision, Multimedia, and AI/ML, highlighting the dominance of conferences in these fields.

- [C13] K. Khan, I. Agarwal, and K. R. Jerripothula, “Convex Hull-ish Object Detection,” *International Conference on Pattern Recognition Workshops (ICPR Workshops)*, 2024.
- [C12] P. Prakash, P. Singh, and K. R. Jerripothula, “TriMoFaceNet: A Trimmed MobileFaceNet Architecture for Resource-constrained Environments,” *International Conference on Image, Video Processing and Artificial Intelligence (IVPAI)*, 2024.
- [C11] V. Vats[†] and K. R. Jerripothula, “Adversarial Examples with Specular Highlights,” *IEEE/CVF International Conference on Computer Vision Workshops (ICCVW)*, 2023. [**h5-index: 80**]
- [C10] A. S. Patlan[†] and K. R. Jerripothula, “DASA: Domain Adaptation via Saliency Augmentation,” 25th *IEEE Workshop on Multimedia Signal Processing (MMSP)*, 2023. [**ERA B**]
- [C09] S. A. Ansari[†], K. R. Jerripothula, P. Nagpal[†], and A. Mittal, “Eye-focused Detection of Bell’s Palsy in Videos,” 34th *Canadian Artificial Intelligence Conference (CAAI)*, 2021. [**ERA B**]
- [C08] K. R. Jerripothula, S. A. Ansari[†], and R. Nijhawan, “A Vision-based Solution for Track Misalignment Detection,” 34th *SIBGRAPI Conference on Graphics, Patterns and Images (SIBGRAPI)*, 2021. [**#10** in Computer Graphics (GSM)] [**h5-index: 23**]
- [C07] K. R. Jerripothula, S. K. Shukla[†], S. Jain[†], and S. Singh[†], “Fruit Maturity Recognition from Agricultural, Market and Automation Perspectives,” 47th *Annual Conference of the IEEE Industrial Electronics Society (IECON)*, 2021. [**h5-index: 28**] [**Cite Score: 1.4**]
- [C06] H. Chhabra[†] and K. R. Jerripothula, “Comprehensive Saliency Fusion for Object Co-segmentation,” 23rd *IEEE International Symposium on Multimedia (ISM)*, 2021. [**h5-index: 15**]
- [C05] A. Gautam[†] and K. R. Jerripothula, “SGG: Spinbot, Grammarly and GloVe based Fake News Detection System,” *IEEE International Conference on Multimedia Big Data (BigMM)*, 2020. [**h5-index: 22**]
- [C04] D. Goyal[†], K. R. Jerripothula, and A. Mittal, “Detection of Gait Abnormalities caused by Neurological Disorders,” 22nd *IEEE Workshop on Multimedia Signal Processing (MMSP)*, 2020. [**ERA B**]
- [C03] K. R. Jerripothula, J. Cai, and J. Yuan, “QCCE: Quality Constrained Co-saliency Estimation for Common Object Detection,” *IEEE Visual Communications and Image Processing (VCIP)*, 2015. [**ERA B**]
- [C02] K. R. Jerripothula, J. Cai, and J. Yuan, “Group Saliency Propagation for Large Scale and Quick Image Co-segmentation,” *IEEE International Conference on Image Processing (ICIP)*, 2015. [**GGS A-**]
- [C01] K. R. Jerripothula, J. Cai, F. Meng, and J. Yuan, “Automatic Image Co-segmentation using Geometric Mean Saliency,” *IEEE International Conference on Image Processing (ICIP)*, 2014. [**Top 10% Paper**][**GGS A-**]

PATENTS

- [P01] K. R. Jerripothula, D. Lal, N. Xu, and R. Harb, “Automated radial blurring based on saliency and co-saliency,” *United States patent application US 18/129,215*, 2024.

FUNDING

K. R. Jerripothula, “Complex-valued Neural Networks for Dense Prediction Tasks,” *Initiation Grant, IIT Kanpur*, 2025-27. [Rs. 25.0 Lacs]

K. R. Jerripothula, “Design and Development of Face Detection and Recognition Solution,” *Bharat Electronics Ltd.*, 2024-25. [Rs. 27.9 Lacs]

K. R. Jerripothula, “Visual Saliency and Enhancements,” *Adeia Inc.*, 2022-23. [US\$ 15,000 (Rs. 12.2 Lacs)]

S. Anand and K. R. Jerripothula, “[Artificial Intelligence for Monitoring of Wildlife for Conservation \(AIM-Wildlife Conservation\)](#),” *Core Research Grant (CRG), Science and Engineering Research Board (SERB), GoI*, 2021-24. [Rs. 61.3 Lacs]

K. R. Jerripothula, “Semi-supervised, Weakly-supervised, or Self-supervised Semantic Object Detection and Segmentation for Smart-city Applications,” *Initiation Research Grant, IIIT-Delhi*, 2020-21. [Rs. 5.0 Lacs]

V. Kumar and K. R. Jerripothula, “Advanced Programming Module,” *CSE DU, IIIT-Delhi*, 2022-23. [Rs. 1.4 Lacs]

K. R. Jerripothula, “Image Quality Assessment and Improvement,” *Vehant Technologies*, 2022-24. [Rs. 10.0 Lacs]

INVITED TALKS

“[Video Segmentation](#)”

Academic Summit 1.0, Oct. 2024, Samsung Research Institute, Noida, India. [[Coverage Link](#)]

“[Vision-based Diagnosis of Neurological Disorders](#)”

AICTE ATAL FDP on Healthcare Data Analytics using Artificial Intelligence and Machine Learning, Dec. 2021, COEP, India. [[Video Link](#)]

“[Deep Learning](#)”

AICTE ATAL FDP on Artificial Intelligence, Oct. 2020, NIT Allahabad, India. [[Video Link](#)]

AWARDS

Outstanding Researcher Award, Graphic Era

For 2017-18 academic year.

Top 10% Paper Award, IEEE ICIP 2014

Koteswar Jerripothula, Jianfei Cai, Fanman Meng, and Junsong Yuan,
“[Automatic Image Co-Segmentation Using Geometric Mean Saliency](#)”

NTU Research Scholarship

From Nanyang Technological University, Singapore, for the period 2013-2017.

Institute Merit-cum-means Scholarship

From Indian Institute of Technology Roorkee, India, for the period 2008-2012.

All India Rank 35, JMO

In KVS Junior Maths Olympiad (JMO) conducted by Kendriya Vidyalaya Sangathan for 10th Class during 2005-06.

SKILLS

MATLAB, C/C++, Java, JavaFX, Python, Orange and Latex.

POSTGRADUATE STUDENTS - Saurabh Yadav (PhD Student, IIIT-Delhi) (*Ongoing*)[[Paper](#)]

- Avi Gupta (PhD Student, IIIT-Delhi) (*Ongoing*)[[Paper](#)]

- Anubhav Dixit (PhD Student, IIT Kanpur) (*Ongoing*)

- Ayushi Ojha (PhD Student, IIT Kanpur) (*Ongoing*)
- Sakshi Goel (PhD Student, IIT Kanpur) (*Ongoing*)
- Suryansh Singh (MTech Thesis Student, IIT Kanpur) (*Ongoing*)
- Shreyansh Jain (MTech Thesis Student, IIIT-Delhi) (*Completed*)[Thesis][Paper]
- Harsh V Badhauriya (MTech Thesis Student, IIIT-Delhi) (*Completed*)[Thesis]
- Aman Kumar (MTech Thesis Student, IIT Kanpur) (*Ongoing*)
- Harshit Chhabra (MTech Project Student, IIIT-Delhi) (*Completed*)[Paper]
- Kaamraan Khan (MTech Project Student, IIIT-Delhi) (*Completed*)[Paper]
- Ishita Agarwal (MTech Project Student, IIIT-Delhi) (*Completed*)[Paper]
- Isha Duggal (Senior Resident, MAIDS) (*Ongoing*)
- Rashmil Renu (PG Resident, MAIDS) (*Ongoing*)
- Simran Bhatia (PG Resident, MAIDS) (*Ongoing*)

PROFESSIONAL SERVICES and MEMBERSHIPS

- Area Chair for ICME'24 & ICME'25
- Member of National Advisory Committee for CVIP'24
- Session Chair at ICME'22 & BigMM'20
- Reviewer for CVPR, ECCV, ICCV, WACV, ICLR, AAAI, NeurIPS & AISTATS
- Reviewer for TIP, TMM, TCSVT, TMI, TOMM, TETCI, PR, CVIU & MVA
- IIIT-Delhi CSE Department Website Coordinator
- IIIT-Delhi Faculty In-Charge (International Students)
- IIIT-Delhi Ranking Committee Member
- IEEE & ACM Member

REFERENCES

[Jianfei Cai](#)

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[Junsong Yuan](#)

Professor

Computer Science and Engineering Department, University at Buffalo, USA

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[Shijian Lu](#)

Associate Professor

School of Computer Science and Engineering, NTU, Singapore

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