3131 Watkins Drive, Apt 32
Riverside, CA 92507
☎ +1-951-880-5556
✉ rpand002@ucr.edu
https://rpand002.github.io/

Rameswar Panda

Research Interests

Computer Vision, Machine Learning, Multimedia

Education

2014–Present **University of California, Riverside**, USA.
Ph.D. Candidate in Electrical and Computer Engineering
Advisor: Amit K. Roy-Chowdhury link
Thesis: Beyond Supervised Learning: Summarizing Videos with Incidental Supervision

2011–2013 **Jadavpur University**, India.
M.S. in Computer Engineering
Advisor: Ananda S. Chowdhury link
Thesis: Graph Theoretic Solutions for Two Multimedia Problems

2007–2011 **Biju Patnaik University of Technology**, India.
B.Tech. in Electronics and Telecommunication Engineering

Research Experience

09.2014 – Present **University of California, Riverside**, USA.
Graduate Student Researcher, Video Computing Group
Advisor: Amit K. Roy-Chowdhury
- Incidental Supervision for Video Summarization
- Unsupervised Adapative Person Re-Identification
- Reinforcement Learning for Online Video Fast-Forwarding
- Webly Supervised Learning for Image-Text Retrieval
- Advertisement Image Understanding (Joint Work with Adobe Research)

06.2018 – Present **NEC Labs America**, Cupertino, USA.
Research Intern, Media Analytics Group
Mentors: Xiang Yu, Samuel Schulter, Manmohan Chandraker
- Cross-Dataset Knowledge Transfer for Person Re-Identification

06.2017-11.2017 **Adobe Research**, San Jose, CA.
Research Intern, Creative Intelligence Lab
Mentors: Jianming Zhang, Haoxiang Li, Joon-Young Lee, Xin Lu
- Understanding and Overcoming Dataset Bias in Visual Emotion Analysis

06.2016-09.2016 **Siemens Corporate Research**, Princeton, USA.
Research Intern, Computer Vision Group
Mentors: Ziyan Wu, Jan Ernst
- Weakly Supervised Defect Detection and Localization in Images

06.2013-08.2014 **Silicon Institute of Technology**, Bhubaneswar, India.
Research Assistant, Department of ETC
Mentor: Milan K. Biswal
- Personalized Video Key Frame Extraction using Social Media Clues

Jul. 2011 - Jun. 2013 **Jadavpur University**, Kolkata, India.
Research Assistant, IVPR Group
Advisor: Ananda S. Chowdhury
- Video Key Frame Extraction using Delaunay Graph Clustering
- Movie Scene Segmentation using Fast Spectral Clustering

Publications (Google Scholar Profile)

Journal Papers

TIP 2017 **Diversity-aware Multi-Video Summarization**.
Rameswar Panda, Niluthpol C. Mithun, Amit K. Roy-Chowdhury
IEEE Transactions on Image Processing, 2017 paper

TMM 2017 **Multi-View Surveillance Video Summarization via Joint Embedding and Sparse Optimization**.
Rameswar Panda, Amit K. Roy-Chowdhury
IEEE Transactions on Multimedia, 2017 paper

TCYB 2017 **Nystrom Approximated Temporally Constrained Multi-similarity Spectral Clustering Approach for Movie Scene Detection**.
Rameswar Panda, Sanjay K. Kuanar, Ananda S. Chowdhury
IEEE Transactions on Cybernetics, 2017 paper

CVIU 2016 **Continuous Adaptation of Multi-Camera Person Identification Models through Sparse Non-redundant Representative Selection**.
Abir Das, Rameswar Panda, Amit K. Roy-Chowdhury
Computer Vision and Image Understanding, 2016 paper

JVCIR 2013 **Video Key frame Extraction through Dynamic Delaunay Clustering with a Structural Constraint**.
Sanjay K. Kuanar, Rameswar Panda, Ananda S. Chowdhury
Journal of Visual Communication and Image Representation paper

Conference Papers

MM 2018 **Webly Supervised Joint Embedding for Cross-Modal Image-Text Retrieval**.
Niluthpol C. Mithun, Rameswar Panda, Evangelos Papalexakis, Amit K. Roy-Chowdhury
ACM International Conference on Multimedia, 2018 paper

CVPR 2018 **FFNet: Video Fast-Forwarding via Reinforcement Learning**.
Shuyue Lan, Rameswar Panda, Qi Zhu, Amit K. Roy-Chowdhury
IEEE Conference on Computer Vision and Pattern Recognition, 2018 paper

ICCV 2017 **Weakly Supervised Summarization of Web Videos**.
Rameswar Panda, Abir Das, Ziyan Wu, Jan Ernst, Amit K. Roy-Chowdhury
International Conference on Computer Vision, 2017 paper

CVPR 2017 **Collaborative Summarization of Topic-Related Videos**.
Rameswar Panda, Amit K. Roy-Chowdhury
IEEE Conference on Computer Vision and Pattern Recognition, 2017 paper

CVPR 2017 Spotlight **Unsupervised Adaptive Re-identification in Open World Dynamic Camera Networks**.
Rameswar Panda*, Amran Hossen Bhuiyan*, Vittorio Murino, Amit K. Roy-Chowdhury
IEEE Conference on Computer Vision and Pattern Recognition, 2017 paper

ICASSP 2017 Oral **Sparse Modeling for Topic-oriented Video Summarization**.
Rameswar Panda*, Amit K. Roy-Chowdhury
International Conference on Acoustics, Speech and Signal Processing, 2017 paper

MM 2016 **Generating Diverse Image Datasets with Limited Labeling**.
Niluthpol C. Mithun, Rameswar Panda, Amit K. Roy-Chowdhury
ACM International Conference on Multimedia, 2016 paper

ICPR 2016 **Video Summarization in a Multi-View Camera Network**.
Oral Rameswar Panda, Abir Das, Amit K. Roy-Chowdhury
International Conference on Pattern Recognition, 2016 paper

ICIP 2016 **Embedded Sparse Coding for Summarizing Multi-View Videos**.
Rameswar Panda, Abir Das, Amit K. Roy-Chowdhury
International Conference on Image Processing, 2016 paper

ICIP 2015 **Active Image Pair Selection for Continuous Person Re-identification**.
Abir Das, Rameswar Panda, Amit K. Roy-Chowdhury
International Conference on Image Processing, 2015 paper

ICPR 2014 **Scalable Video Summarization using Skeleton Graph and Random Walk**.
Oral Rameswar Panda, Sanjay K. Kuanar, Ananda S. Chowdhury
International Conference on Pattern Recognition, 2014 paper

ICPR 2012 **Video Story-board Design using Delaunay Graphs**.
Ananda S. Chowdhury, Sanjay K. Kuanar, Rameswar Panda, Moloy N. Das
International Conference on Pattern Recognition, 2012 paper

Manuscripts Under Review

TPAMI 2018 **Unsupervised Adaptation of Re-identification Models in Camera Networks**.
Rameswar Panda, Amran Hossen Bhuiyan, Vittorio Murino, Amit K. Roy-Chowdhury
IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018

ECCV 2018 **Contemplating Visual Emotions: Understanding and Overcoming Dataset Bias**.
Rameswar Panda, Jianming Zhang, Haoxiang Li, Joon-Young Lee, Xin Lu, Amit K. Roy-Chowdhury
European Conference on Computer Vision, 2018

TCSVT 2018 **Construction of Diverse Image Datasets from Web with Limited Labeling**.
Niluthpol C. Mithun, Rameswar Panda, Amit K. Roy-Chowdhury
IEEE Transactions on Circuit and Systems for Video Technology, 2018

Patents

62/430,463 **Weakly Supervised Visual Anomaly Detection and Segmentation in Images**.
Rameswar Panda, Ziyan Wu, Ramesh Nair, Arun Innaje, Jan Ernst
U.S. Provisional Patent Application filed on Dec 06, 2016

Talks

July 2017 **Unsupervised Adaptive Re-identification in Dynamic Camera Network**.
Spotlight Presentation, CVPR, Hawaii, USA.

Feb. 2017 **Deep Learning for Computer Vision**.
Guest Lecture, EE 241, UC Riverside.

Sept. 2016 **Embedded Sparse Coding for Summarizing Multi-View Videos**.
Oral Presentation, ICIP, Phoenix, USA.

Dec. 2015 **Sparse Optimization for Summarizing Videos**.
GIAN Workshop on Video Understanding, IIT, Kharagpur, India.

Dec. 2013 **A Frequency Domain Approach to Silhouette based Gait Recognition**.
Oral Presentation, NCVPRIPG, Jodhpur, India.

Honors & Awards

June 2018 **S. Sue Johnson Endowed Graduate Award**, University of California, Riverside.
June 2018 **Doctoral Consortium Award**, IEEE Computer Vision and Pattern Recognition.
Apr. 2018 **Dissertation Year Program Fellowship Award**, University of California, Riverside.
Oct. 2017 **Graduate Research Symposium Scholarship**, Amazon Research.
Sept. 2014 **Dean's Distinguished Fellowship Award**, University of California, Riverside.
June 2013 **University 2nd rank in M.S.**, Jadavpur University, India.

Professional Services

Conference Reviewer
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2017, 2018
International Conference on Computer Vision and Pattern Recognition (**ICCV**), 2017
European Conference on Computer Vision (**ECCV**), 2018
Asian Conference on Computer Vision (**ACCV**), 2018
International Conference on Computer Vision and Image Processing (**CVIP**), 2018

Journal Reviewer
IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**)
IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**)
IEEE Transactions on Image Processing (**TIP**)
IEEE Transactions on Multimedia (**TMM**)
IEEE Transactions on Industrial Electronics (**TIE**)
Computer Vision and Image Understanding (**CVIU**)
Machine Vision and Applications (**MVA**)
Pattern Recognition Letters (**PRL**)
Signal Processing Letters (**SPL**)

Teaching Experience

Teaching Assitant **University of California, Riverside**.
- EE 240 Pattern Recognition (Spring 2017)
- EE 215 Stochastic Process (Fall 2016)

Teaching Assitant **Jadavpur University, India**.
- C Programming and Data Structures

Instructor **Silicon Institute of Technology, India**.
- Image Processing
- Digital Signal Processing

Technical Skills

Deep Learning Libraries Caffe, Pytorch, Keras
Programming Python, C/C++
Toolbox / Software MATLAB, OpenCV
Operating Systems Windows, Unix, Mac OS
Other Expertise MS Office (Word, Excel, and PowerPoint), Latex etc.

References

Available on Request.