

RICHARD J. RADKE

Professor, Department of Electrical, Computer, and Systems Engineering
Rensselaer Polytechnic Institute

PROFESSIONAL PREPARATION

Rice University, Houston, TX, Mathematics, Computational and Applied Mathematics (dual) B.A., 1996
Rice University, Houston, TX, Computational and Applied Mathematics M.A., 1996
Princeton University, Princeton, NJ, Electrical Engineering M.A., 1998
Princeton University, Princeton, NJ, Electrical Engineering Ph.D., 2001

APPOINTMENTS

Professor, Department of Electrical, Computer, and Systems Engineering, Rensselaer Polytechnic Institute, Troy, NY, June 2013-date.

Associate Professor, Department of Electrical, Computer, and Systems Engineering, Rensselaer Polytechnic Institute, Troy, NY, May 2007-June 2013.

Assistant Professor, Department of Electrical, Computer, and Systems Engineering, Rensselaer Polytechnic Institute, Troy, NY, August 2001-May 2007.

PRODUCTS

Closely Related to Proposal

- S. Karanam, M. Gou, Z. Wu, A. Rates-Borras, O. Camps, and R.J. Radke, A Systematic Evaluation and Benchmark for Person Re-Identification: Features, Metrics, and Datasets, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, Vol. 41, No. 3, pp. 523-536, March 2019.
- O. Camps, M. Gou, T. Hebble, S. Karanam, O. Lehmann, Y. Li, R.J. Radke, Z. Wu, and F. Xiong, From the Lab to the Real World: Re-Identification in an Airport Camera Network, *IEEE Transactions on Circuits and Systems for Video Technology, Special Issue on Group and Crowd Behavior Analysis for Intelligent Multi-camera Video Surveillance*, Vol. 27, No. 3, pp. 540-553, March 2017.
- M. Zheng, S. Karanam, Z. Wu, and R.J. Radke, Re-Identification with Consistent Attentive Siamese Networks, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, June 2019.
- M. Zheng, S. Karanam, and R.J. Radke, RPIfield: A New Dataset for Temporally Evaluating Person Re-Identification, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR) Workshops*, June 2018.
- S. Karanam, Y. Li, and R.J. Radke, Person Re-Identification with Discriminatively Trained Viewpoint Invariant Dictionaries. International Conference on Computer Vision (ICCV), December 2015.

Other Significant Products

- R.J. Radke. *Computer Vision for Visual Effects*, Cambridge University Press, November 2012.
- Z. Wu, Y. Li, and R.J. Radke, Viewpoint Invariant Human Re-Identification in Camera Networks Using Pose Priors and Subject-Discriminative Features. *IEEE Transactions on Pattern Analysis and Machine Intelligence*. Vol. 37, No. 5, pp. 1095-1108, May 2015.
- D. Devarajan, Z. Cheng, and R.J. Radke, Calibrating Distributed Camera Networks. *Proceedings of the IEEE, Special Issue on Distributed Smart Cameras*, Vol. 96, No. 10, pp. 1625-1639, October 2008.
- A.M. Cheriyyadat and R.J. Radke. "Detecting Dominant Motions in Crowds", *IEEE Journal of Special Topics in Signal Processing, Special Issue on Distributed Processing in Vision Networks*, Vol. 2, No. 4, pp. 568-581, August 2008.
- R.J. Radke, S. Andra, O. Al-Kofahi, and B. Roysam. "Image Change Detection Algorithms: A Systematic Survey", *IEEE Transactions on Image Processing*, Vol. 14, No. 3, pp. 294-307, March 2005.

SYNERGISTIC ACTIVITIES

- **Deputy Director**, *NSF Engineering Research Center for Lighting Enabled Systems and Applications* (August 2015—present); Controls Thrust Lead, January 2013—present.
- **Associate Director**, *NSF Engineering Research Center for Subsurface Sensing and Imaging* (October 2010-August 2012).
- **Senior Area Editor**, *IEEE Transactions on Image Processing*.
- **Affiliated Faculty**, NSF Engineering Research Center for Lighting Enabled Systems and Applications (LESA); DHS Center of Excellence for Awareness and Localization of Explosives-Related Threats (ALERT); NSF Engineering Research Center for Subsurface Sensing and Imaging Systems (CenSSIS); RPI Center for Automation Technologies and Systems (CATS); RPI Experimental Media and Performing Arts Center (EMPAC); RPI Cognitive and Immersive Systems Laboratory (CISL)
- **YouTube Channel**. Over 100 fully annotated video lectures for Digital Signal Processing, Digital Image Processing, Computer Vision for Visual Effects, and Engineering Probability with over 21,000 subscribers and 2,400,000 views.