

Manoj Kumar

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EDUCATION

- Ph.D. Neuroscience Program, University of Illinois at Urbana-Champaign, Urbana, IL, 2017
M.S. Engineering and Applied Science, Yale University, 1999
B.Tech. Mechanical Engineering, ITBHU Varanasi, 1992

ACADEMIC APPOINTMENTS

- 2017– Postdoctoral Research Associate, Princeton University
2021, Spring Lecturer, Dept. of Electrical Engineering, Princeton University

PUBLICATIONS

Journal Articles

- Kumar, M., Anderson, M. J., Antony, J. W., Baldassano, C., Brooks, P. P., Cai, M. B., Chen, P.-H. C., Ellis, C. T., Henselman-Petrusek, G., Huberdeau, D., Hutchinson, J. B., Li, Y. P., Lu, Q., Manning, J. R., Mennen, A. C., Nastase, S. A., Richard, H., Schapiro, A. C., Schuck, N. W., ... Norman, K. A. (2022). BrainIAK: The Brain Imaging Analysis Kit. *Aperture Neuro*, 1(4), 19. <https://www.humanbrainmapping.org/i4a/pages/index.cfm?pageid=4010>
- Kumar, M., Federmeier, K. D., & Beck, D. M. (2021). The N300: An Index for Predictive Coding of Complex Visual Objects and Scenes. *Cerebral Cortex Communications*, 2(2), tgabo30. <https://doi.org/10.1093/texcom/tgabo30>
- Levitis, E., Van Praag, C. D. G., Gau, R., Heunis, S., DuPre, E., Kiar, G., Bottenhorn, K. L., Glatard, T., Nikolaidis, A., Whitaker, K. J., et al. (2021). Centering inclusivity in the design of online conferences—an ohbm–open science perspective. *GigaScience*, 10(8), giabo51. <https://doi.org/10.1093/gigascience/giabo51>
- Kumar, M., Ellis, C. T., Lu, Q., Zhang, H., CapotÄ, M., Willke, T. L., Ramadge, P. J., Turk-Browne, N. B., & Norman, K. A. (2020). BrainIAK tutorials: User-friendly learning materials for advanced fMRI analysis. *PLOS Computational Biology*, 16(1), e1007549. <https://doi.org/10.1371/journal.pcbi.1007549>
- Kumar, M., Federmeier, K. D., Fei-Fei, L., & Beck, D. M. (2017). Evidence For Similar Patterns of Neural Activity Elicited by Picture- and Word-based Representations of Natural Scenes. *NeuroImage*. <https://doi.org/10.1016/j.neuroimage.2017.03.037>

Conference Proceedings

- 2020 Kumar, M., Turk-Browne, N.B., Ramadge, P.J., and Norman, K.A., 2020 “BrainIAK education: User-friendly tutorials for advanced, computationally-intensive fmri analysis”, Organization for Human Brain Mapping, Montreal (virtual).
- 2019 Kumar, M., Turk-Browne, N.B., and Norman, K.A., 2019 “The impact of predictability on memory representations”, Society for Neuroscience Annual Meeting, Chicago, IL.
- 2019 Kumar, M., Ellis, C.T., Ramadge, P.J., Norman, K.A., and Turk-Browne, N.B., 2019 “Brainiak education: User-friendly tutorials for advanced, computationally-intensive fmri analysis”, Society for Neuroscience Annual Meeting, Chicago, IL.
- 2019 Kumar, M., Turk-Browne, N.B., Ramadge, P.J., and Norman, K.A., 2019 “BrainIAK Tutorials: User-friendly tutorials for advanced, computationally-intensive fmri analysis”, Organization for Human Brain Mapping, Rome.
- 2018 Kumar, M., Ellis, C.T., Ramadge, P.J., Norman, K.A., and Turk-Browne, N.B., 2018 “Brainiak education: User-friendly tutorials for advanced, computationally-intensive fmri analysis”, Society for Neuroscience Annual Meeting, San Diego, CA.
- 2018 Kumar, M., Turk-Browne, N.B., Ramadge, P.J., and Norman, K.A., 2018 “BrainIAK Tutorials: User-friendly tutorials for cutting-edge MVPA methods”, Organization for Human Brain Mapping, Singapore.
- 2017 Kumar, M., Zhang, S., and Beck, D. M., 2017 “Similarities Between Deep Neural Networks and Brain Regions In Processing Good and Bad Exemplars of Natural Scenes”, Vision Sciences Society Meeting, St. Petersburg, FL.
- 2017 Kumar, M., Zhang, Y., Beck, D. M., and Federmeier, K. D., 2017 “It’s the Right Cue: Hemispheric Differences in Predictive Processing of Natural Scenes”, Cognitive Neuroscience Society, San Francisco, CA.
- 2016 Kumar, M., Federmeier, K. D, Fei-Fei, L. and Beck, D. M., 2016 “The neural semantic representations of fine-grained object categories”, Society for Neuroscience Annual Meeting, San Diego, CA.
- 2016 Kumar, M., Federmeier, K. D, Fei-Fei, L. and Beck, D. M., 2016 “Visual and Semantic Neural Representations For Animate and Inanimate Objects”, Vision Sciences Society Meeting, St. Petersburg, FL.
- 2015 Kumar, M., Zhang, Y., Beck, D. M., and Federmeier, K. D., 2015 “The good, the bad and the early: top-down influence on scene categorization”, Oral Presentation at the Society for Neuroscience Annual Meeting, Chicago, IL.
- 2015 Kumar, M., Zhang, Y., Beck, D. M., and Federmeier, K. D., 2015 “Scene Categorization: The Good, The Bad And The Early”, Society for Psychophysiological Research Annual Meeting, Seattle, WA.
- 2015 Kumar, M., Zhang, Y., Beck, D. M., and Federmeier, K. D., 2015 “Scene Categorization: The Good, The Bad And The Early”, Cognitive Neuroscience Society, San Francisco, CA.
- 2015 Kumar, M., Zhang, Y., Beck, D. M., and Federmeier, K. D., 2015 “Scene Categorization: The Good, The Bad And The Early”, Vision Sciences Society Meeting, St. Petersburg, FL.
- 2014 Kumar, M., Federmeier, K. D, Fei-Fei, L. and Beck, D. M., 2014 “Evidence For A Common Semantic Representation For Pictures And Words”, Cognitive Neuroscience Society, Boston, MA.

2013 Kumar, M., Fei-Fei, L. and Beck, D. M., 2013 “Frontal Contributions to Natural Scene Processing”, Vision Sciences Society Meeting, Naples, FL.

WORKSHOPS AND HACKATHONS

2020 BrainIAK at the OHBM Hackathon, Virtual (Montreal)
2019 BrainIAK ISC/SRM Workshop at Princeton University
2019 BrainIAK Workshop at the Princeton University Brainhack
2019 BrainIAK Hackathon at Virginia Tech
2019 BrainIAK at the OHBM Hackathon, Rome
2019 BrainIAK MURI Workshop at Princeton University
2018 BrainIAK Workshop at Princeton University
2018 BrainIAK Hackathon at Yale University