

TRIVIAL PURSUIT: A SHALLOW LEARNING RETROSPECTIVE

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In this talk, I review the history of random features in machine learning over the last ten years. Presenting both my work on the subject and a survey of the related literature, I will show how shallow banks of random features are able to match the performance of complicated learned or engineered features on a variety of difficult learning tasks. I will then describe the present challenges in random feature design and our progress towards making these features scalable, parsimonious, and interpretable.