DEMOCRATIC LEARNING: LEARNING TO REPRESENT DATA FOR EVERYBODY

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In this talk I will describe a simple framework for learning data transforms that are computationally free and help diverse classification and clustering algorithms. When incorporated into standard techniques such as subspace clustering, random forests, and hashing codes, we obtain one to two orders of magnitude improvement at virtually no cost. I will present both the underlying concepts and applications ranging from scene recognition to image classification to 3D object analysis.

Joint work with Qiang Qiu (Duke University) and Alex Bronstein (Tel Aviv University).