

# Approximation by Superpositions of a Sigmoidal Function

Universal approximators

C. Salinas<sup>1</sup>   M. Ruby<sup>1</sup>

<sup>1</sup>Department of Mathematics  
Purdue University

Purdue University Machine Learning Seminar, 2019

A number of diverse applications are concerned with represen

$$\sum_{j=1}^N \alpha_j \sigma(\mathbf{y}_j^T \mathbf{x} + \theta_j),$$