

# Title: Randomization Based Deep and Shallow Learning Methods for Classification

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[http://scholar.google.com.sg/citations?hl=en&user=yZNzBU0AAAAJ&view\\_op=list\\_works&pagesize=100](http://scholar.google.com.sg/citations?hl=en&user=yZNzBU0AAAAJ&view_op=list_works&pagesize=100)

## Abstract:

This talk will first introduce randomization-based feedforward neural networks with closed-form solutions. The popular instantiation of the feedforward type called random vector functional link neural network (RVFL) originated in the mid-1990s. Other feedforward methods are random weight neural networks (RWNN), extreme learning machines (ELM), etc. Another paradigm is based on kernel trick such as the kernel ridge regression which includes randomization for scaling to large training data. Another randomization-based paradigm is the random forest which exhibits highly competitive performances. The talk will also present extensive benchmarking studies using classification datasets.