INPUT OUTPUT LINEARIZATION OF A PILOT PRESSURE PLANT USING A DYNAMIC NEURAL NETWORK

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This paper describes a method for feedback linearization based on dynamic neural network (DNN) models. The parameters of these models can be identified to reproduce the behaviour of a dynamic system. The model is then used to compute the input-output linearization transformations. The same model is used as an open loop observer to provide state information to compute the input-output linearization. An external linear controller is used to control the input output linearized system. The method is applied to a pilot scale pressure plant.