



مرکز آموزش‌های الکترونیکی دانشگاه شهید بهشتی

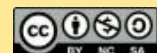
شبکه‌های عصبی مصنوعی

Artificial Neural Networks

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Given an image of a ball,
can you predict where it will go next?



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Sequences in the Wild

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A Sequence Modeling Problem: Predict the Next Word

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Idea #1: Use a Fixed Window

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Idea #2: Use Entire Sequence

Problem #2: Counts Don't Preserve

Problem #3: No Parameter Sharing

Recurrent Neural Networks (RNNs)

Standard Feed-Forward Neural Network

Recurrent Neural Networks

Standard “Vanilla” Neural Network

Recurrent Neural Network (RNN)

Recurrent Neural Network (RNN)

RNN State Update and Output

