

CRUNCH Seminars at Brown, Division of Applied Mathematics

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The Computational Limits of Deep Learning

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In this talk, I would discuss the paper (release by AI Lab of MIT) <https://venturebeat.com/2020/07/15/mit-researchers-warn-that-deep-learning-is-approaching-computational-limits/> describing the Computational Limit of Deep Learning model. I would also discuss what causes training of neural network compute extensive. In brief, I would like to convince the audience that deep learning is not computationally expensive by accident, but by design. This paper presents a reasonable compute performance model for deep learning, which is very simple and establishes a computational complexity for a generic NN model.