

Review of: "Nested Neural Networks: A Novel Approach to Flexible and Deep Learning Architectures"

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Potential competing interests: No potential competing interests to declare.

The article you present appears to have corrected and refined several aspects in response to expert feedback, and several interesting points emerge:

Clarification of Structural Complexity: The analogy between the complex grammatical structure of sentences and the architecture of Nested Neural Networks (NNN) helps to understand how these nested networks can model complex relationships. Experts likely suggested explaining this complexity better by relating it to familiar concepts, such as grammar and verb tenses, to make the NNN architecture easier to grasp.

Simplification of the Nested Layers Concept: The analogy between sentences and nested neural networks makes the concept of nested layers more accessible. Instead of only presenting technical terms like "deep neural network," the author introduced narrative elements (such as the past perfect tense in grammar) to make the notion of nested layers more intuitive and easier to understand, especially for an audience less familiar with complex mathematical concepts.

Improvement of the Comparison Between Language and Computation: Introducing the linguistic analogy seems to have been a strategic choice to improve the understanding of the NNN model. By using everyday language and comparing it to grammatical structures that readers are familiar with, the author made the neural network architecture more accessible. This could have addressed feedback regarding the clarity of the article's message.

Highlighting NNN Performance: The author emphasizes the memory efficiency and better adaptability of NNNs compared to traditional models, which seems to be a direct response to criticisms concerning the limitations of traditional neural networks in terms of scalability and resource requirements. The article highlights that NNNs are more efficient while maintaining high performance, showing that the author's proposal has been refined to demonstrate its potential in practical contexts.

More Detailed Explanation of Related Work: The author clarified the distinction between NNNs and other architectures such as ResNets, DenseNets, or Capsule Networks. This clarification of advances in neural network research shows that the author took expert feedback into account to better position their own contribution relative to the state of the art.

Simplification of the Conceptual Framework: The relationship between nested layers and linguistic concepts such as the past perfect and past perfect progressive tenses has been made explicit to emphasize flexibility and structural coherence. This likely addresses requests for clarification for a broader audience, making the article not only more

accessible but also more precise in presenting the NNN architecture.

Visual and Pedagogical Aspects: The use of the grammatical analogy may also have been suggested as a way to improve the pedagogy of the article, allowing readers to better visualize how an NNN operates through already familiar concepts. This adds a more didactic dimension to the article and enhances its ability to convince and explain clearly.

In summary, the article seems to have greatly corrected and enriched its explanations to make the concept of Nested Neural Networks more understandable and accessible. The comparison with grammatical structure has strengthened the argument by allowing a better visualization of the complexity inherent in nested neural networks, likely meeting experts' expectations in terms of clarity, performance, and scientific positioning.