

SYNOPSIS

Title: Capsule Network

Neural network is a beautiful biologically-inspired programming paradigm which enables a computer to learn from observational data. The primary aim of this seminar is to introduce a new concept in the Neural Networks Architecture by Geoffrey Hinton Capsule Networks. Convolutional Neural Networks (CNNs) are a category of Neural Networks that have proven very effective in areas such as image recognition and classification. Capsule Networks bring an improvement in the old neural network architecture and it has worked better than the Convolutional Neural Networks. This seminar explores the comparison between CNNs and Capsule Networks and the reason for its progress and dominance in the neural network architecture for developing models to solve problems in different domains.

Capsule Networks are primarily used for Image Classification. They can be applied in the areas of Natural Language Processing and Recommender Systems to utilize the textual information in a more efficient manner. This seminar presents a review on text classification using the newly introduced capsule networks. The various domains in which capsule network is applied and has proved to be efficient is also discussed.

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References

- [1] S. Sabour, C. V Nov, and G. E. Hinton, *Dynamic Routing Between Capsules*, 2017.
- [2] 'Y. Wang, A. Sun, and J. Han, *Sentiment Analysis by Capsules*, WWW '18 Proceedings of the 2018 World Wide Web Conference, 2018.
- [3] Jaeyoung Kim, and Sion Jang and Sungchul Choi and Eunjeong Park, *Text Classification using Capsules*, 2018.