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Короткий огляд (реферат):	In this chapter the historical review and current state of neural network development is presented . It is pointed out that the modern philosophical concept of linguistic neural networks, which has been in development in the last 60–70 years, is based on both ancient and current history of human knowledge. From a mathematical point of view, the concepts of single-layer and multilayer perceptron's, corresponding schemes, and corresponding mathematical relations are discussed. Probabilistic models of linguistic neural networks are also considered. Namely, classic recurrent networks, networks with encoders and decoders for translation, networks with attentional mechanisms, and the model of modern Transfer Technology are considered. It is pointed out that modern models of neural networks are based on converting words into vectors and using vector and matrix operations. As examples on using word vectors for text encoding and decoding, context modeling algorithms and length estimation between the symbols are considered. A comparison of these two methods of text coding is also given. Novel approaches and standards in large language models' neural networks are also considered. Several practical examples are given. Due to immense development, AI-driven apps based on LLMs can be deployed practically everywhere. These areas include healthcare, finances, industry, traffic and logistics, education, science, and customer services. As an example, for further deployment areas, programming and software technology have been considered.