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Title : SELF-PROGRAMMING ARTIFICIAL INTELLIGENCE USING CODE-GENERATING LANGUAGE MODELS

Keywords specific to the paper:Self-programmed artificial intelligence, Code Generator Language Template, Automatic improvement, Sub-model programming, Rethinking Neural, Networks, MNIST, CIFAR-10, EMNIST, Meta-learning, Automated code generation, AutoML

The article presents the development and experimental validation of a self-programmed artificial intelligence that uses a language model that generates code, the ability of the system to modify its own source code, improve and program sub-templates for different tasks. The AI system can autonomously rethink neural networks to improve performance on tasks like MNIST, CIFAR-10 and EMNIST.

It describes the development and experimental validation of a self-programmed artificial intelligence system using a code-generating language model.
He talks about an AI system that can modify its own source code, program sub-models to perform auxiliary tasks. Everything can be auto-modified: Model architecture, computational capacity and learning dynamics
It shows different methods used, stages of training, reprogramming and other algorithms. Also this system can allow other models or neural networks machine learning
Various ancillary work of meta-learning, automated code generation and AutoML are also addressed in the document.

The paper also talks about an AI system that modifies its own neural network design to achieve better performance on tasks such as MNIST, CIFAR-10 and EMNIST.
The AI generates modified versions of the source code, stores them on a target data set, evaluates their performance and selects the best performing code according to the mentioned task, and autonomously. She would be able to rewrite her own code and expand her capabilities. The paper mentions future research, such as training on several types of computer codes and an implementation of self-correction to improve performance and generalization.

AI Model used:
The ai model used is Code Generator Language Model, This model is capable of generating source code in Python language. It is used by the AI to modify its own source code and program sub-models.