

~~Applications of ANN~~ Applications of ANN

- ① ANN applications have been used in the field of solar energy for modeling and design of a solar steam generating plant.
- ② ANN are useful in system modeling, such as implementation of complex mapping and system identification.
- ③ ANN are used for the estimation of heating-loads of buildings.
- ④ ANN are used in diverse applications in

Control, robotics, pattern recognition, forecasting, medicine, power systems, manufacturing, optimization, signal processing and social psychological sciences.

- ⑤ ANN are used ~~for~~^{the} prediction of air flows in a naturally ventilated test room and for the prediction of the energy consumption of solar building.

⑥ Advantages

- ① It can perform tasks in which a linear program cannot perform
- ② When an element of the ANN fails, it can continue without any problem by their parallel nature
- ③ An ANN does not need to be reprogrammed as it learns itself.
- ④ As adaptive, intelligent systems, ANNs are robust and excel at solving complex problem.

⑦ Disadvantages

- ① ANN requires training to operate
- ② Requires high processing time for large NNs