

Artificial Intelligence

Management Information Systems

16



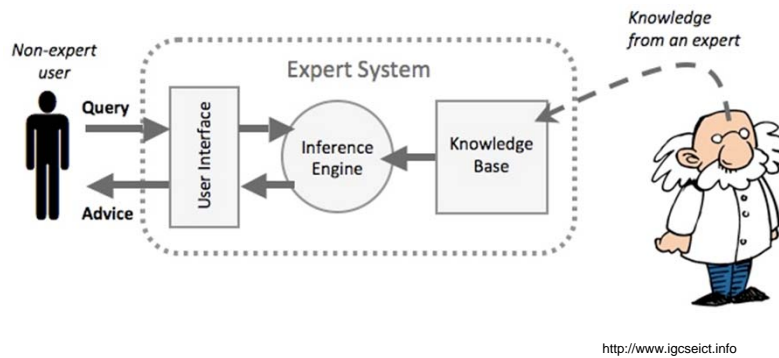
- 166137-01+02
- Management Information Systems
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- Sync Sangwon Lee, Ph. D
- D. of Information & Electronic Commerce
- WONKWANG University

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- 01. Artificial Intelligence
- 02. Expert Systems
- 03. Artificial Neural Network

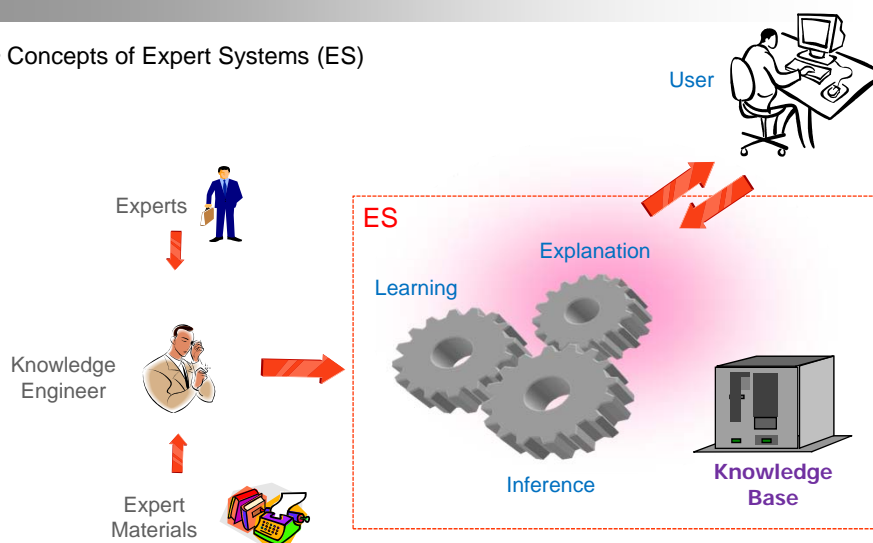
02. Expert Systems

- Expert Systems (ES)
 - = Systems for Experts or by Experts



02. Expert Systems

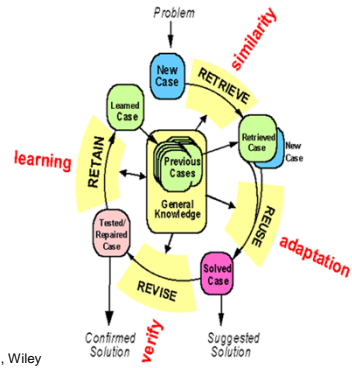
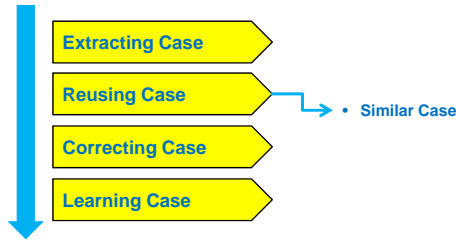
- Concepts of Expert Systems (ES)



02. Expert Systems

- Concepts of Inference

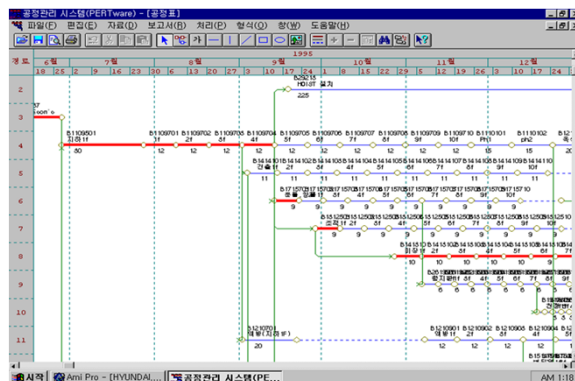
Procedure of Case-Based Systems



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02. Expert Systems

- Concepts of Inference



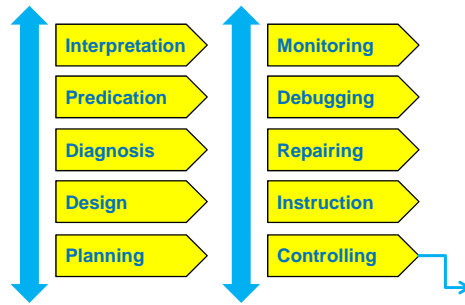
Example of Case-Based Systems

02. Expert Systems

<http://www.atariarchives.org>

- Practical Uses of Expert Systems (ES)

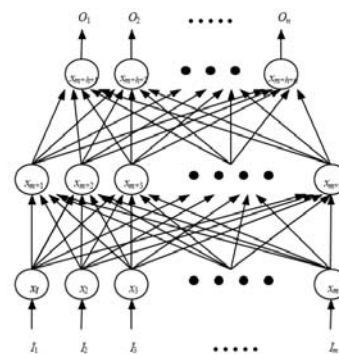
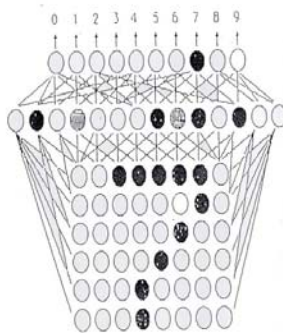
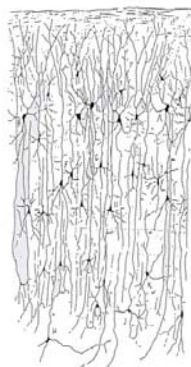
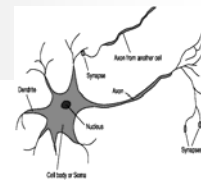
Practical Uses of ES



- Expert Systems in Manufacturing
 - CAD/CAM and Engineering Design
 - Machine Diagnosis and Maintenance
 - Process Control
 - Scheduling and Production Management
 - Energy Management
 - Quality Control
 - Manufacturing Simulation
 - Petroleum and Resource Exploration
 - Electric Utilities and Nuclear Facilities
 - Welding

03. Artificial Neural Network

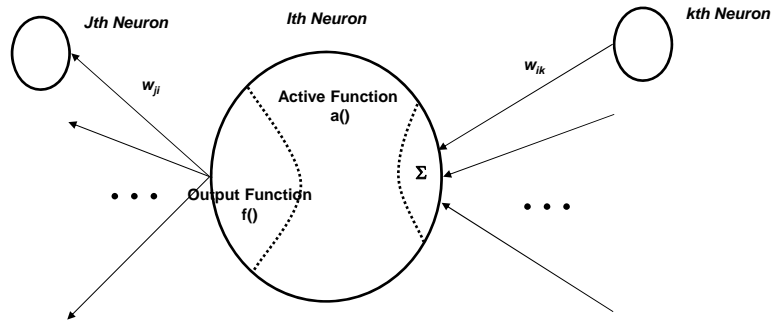
- Artificial Neural Network (ANN)
 - Mathematical Model by use of Neuron



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03. Artificial Neural Network

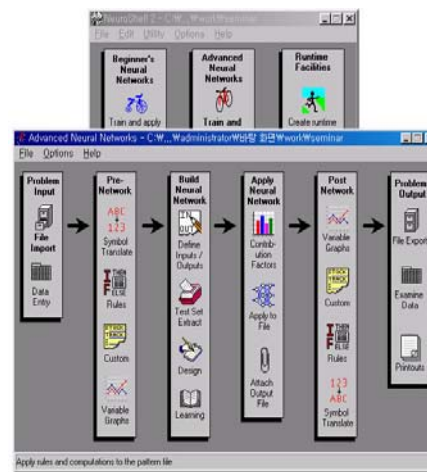
- Modeling for Artificial Neural Network



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03. Artificial Neural Network

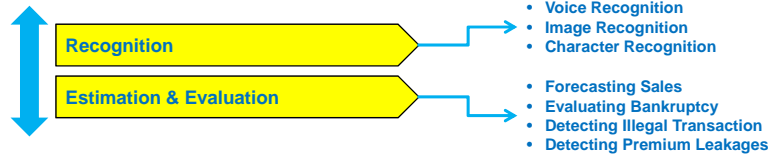
- Tools for Artificial Neural Network
 - Ex. Neuro-Cell



03. Artificial Neural Network

- Practical Uses of Artificial Neural Network (ANN)

Practical Uses of ANN



Ex) Fraud Detection Systems

20th, Men, Single, History, ... → Fraud

→ $aY + bM + cS + dH = F$



Crime Detection Systems?