3/5/92  Expert Systems

I- How ES arose

A. The performance motive, the dream of the computer
   world class levels of performance
   or beyond world class levels

B. DENDRAL -> MYCIN -> PUFF -> SACC"
   
   ↓

   HASP -> CRYSALES -> AGE

   EMYCIN

   MOLGEN -> UNITS -> KEE

   at CMU/DEC

   RI -> XCON

   ∪

   at Rutgers and MIT

   at Schlumberger

   medical applications

   oil service applications

II A look at a modern (up-to-date) ES

Note these:

Design ++ Video

The software architecture of D++

the integration with mainstream (CAD)

KR as frame hierarchies w/ inheritance

Knowledge publishing (sell libraries)

The economic effect of D++ - speed up proposals

by factor of 10 (Famelli)
III  Focus on application, via the benefits side

a. speedup — audience selection
b. cost saving — IBM Burlington
c. quality improvement — AmEx AA
d. new products — Intellipath
   Hitachi Sendai Railway braking system
e. capturing knowledge — Land Lease

IV  Classes of applications

Note:

on scheduling — mention Desert war logistics
Knowledge publishing — "Tax cut," Grammatik
   Intellipath

Compliance systems — Taxpayer's Assistant (IRS)
   Fresno/Merced counties welfare

V  The E.S. Business

(see other notes)
Expert System topics to be covered

Explanation

Shells

KA by machine - Meta-DENDRAL

Selecting an application