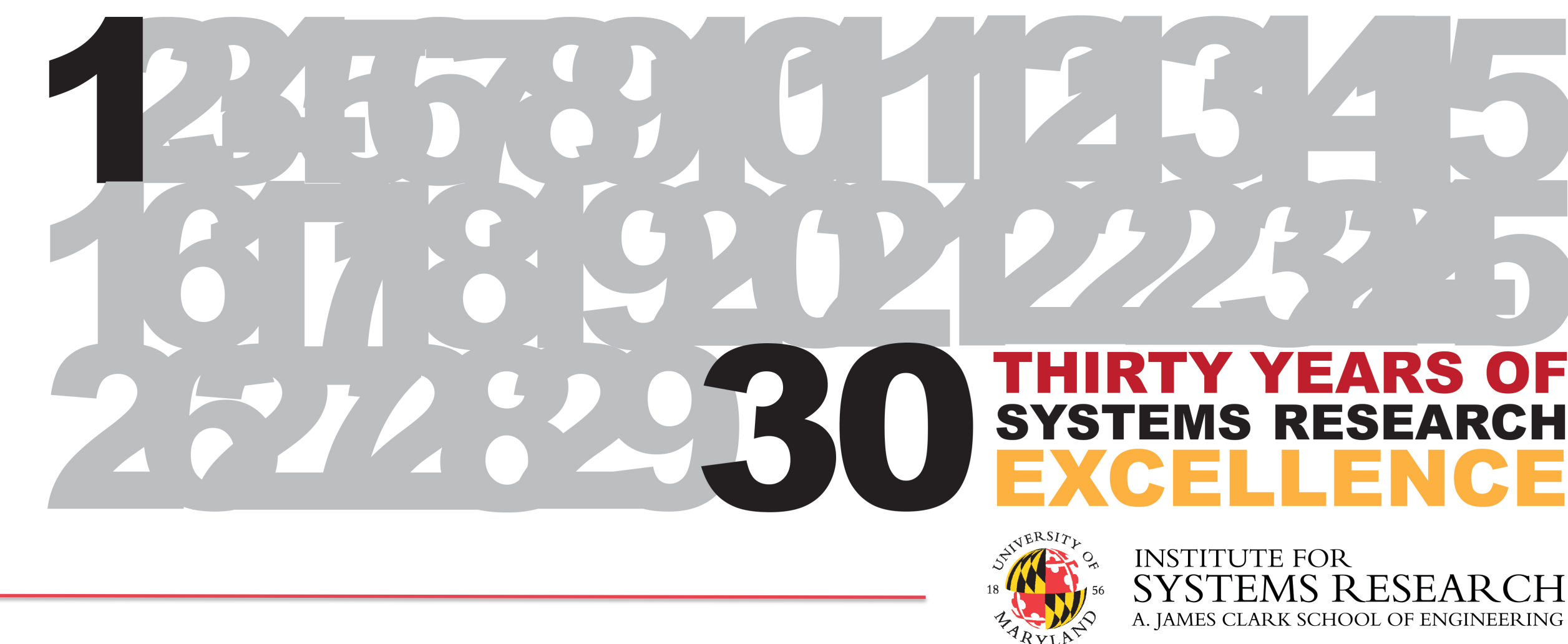


AI Planning: Theory and Applications

Dana S. Nau

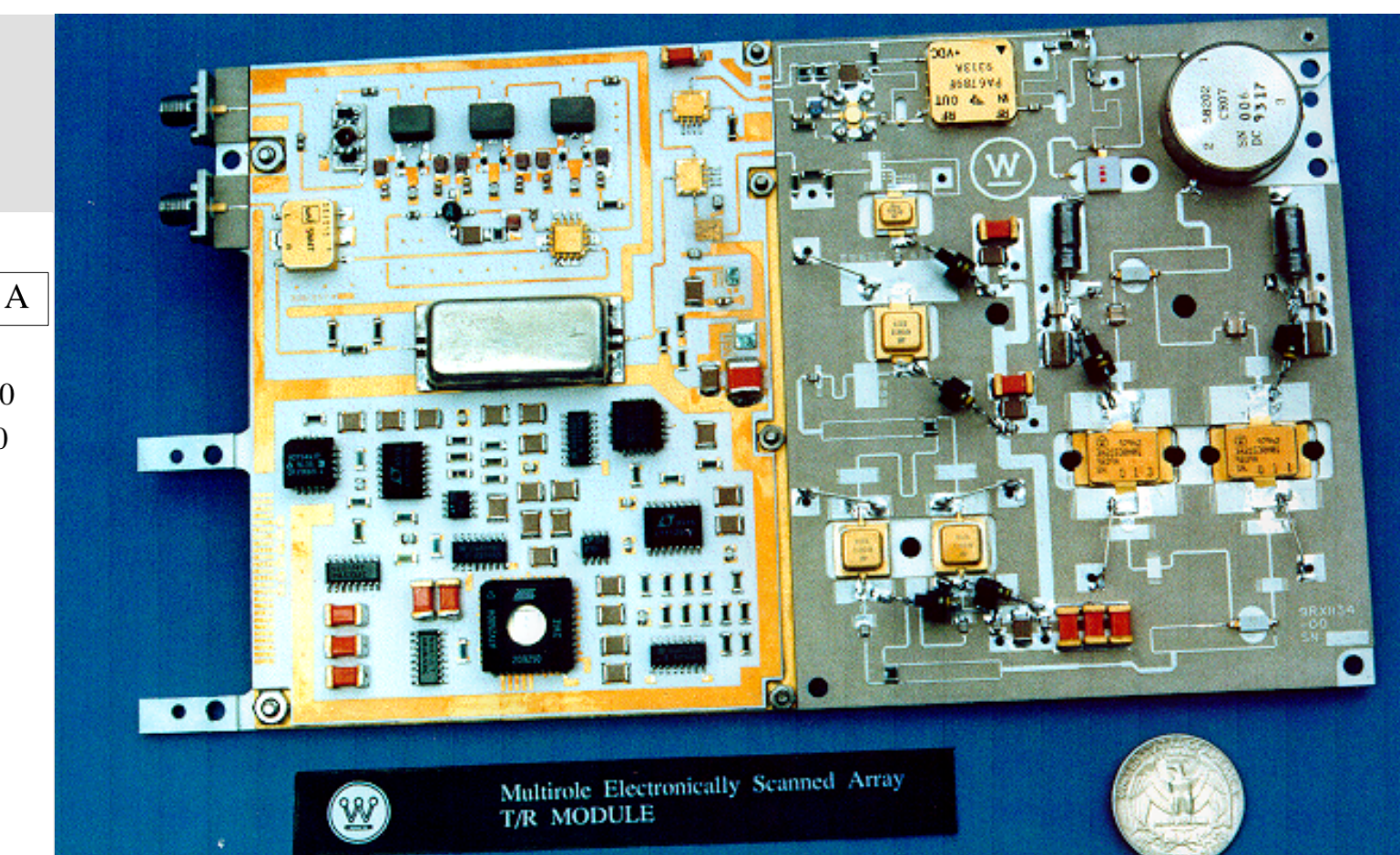
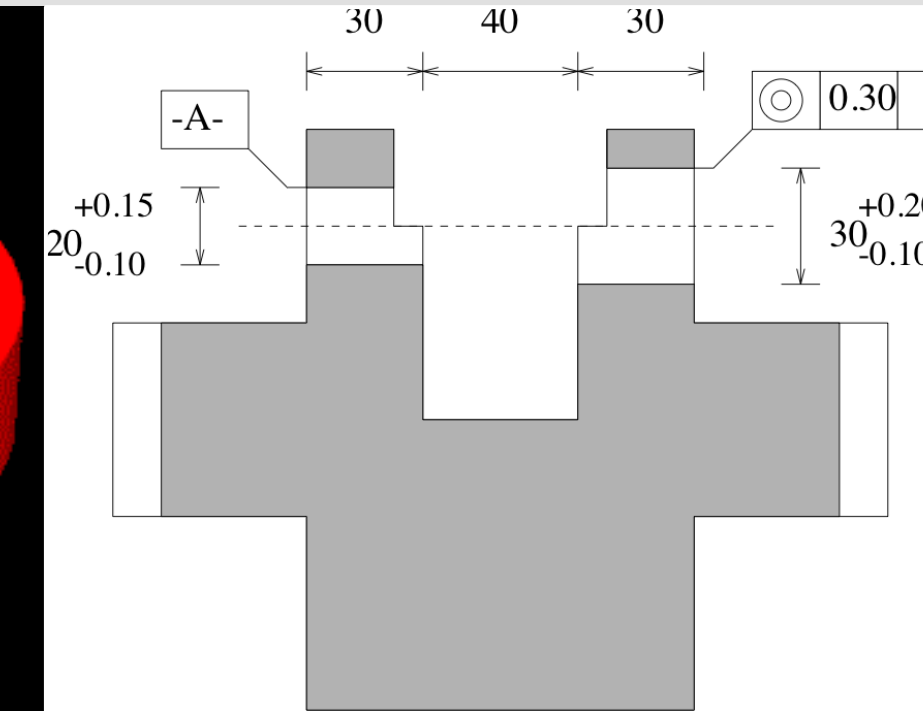
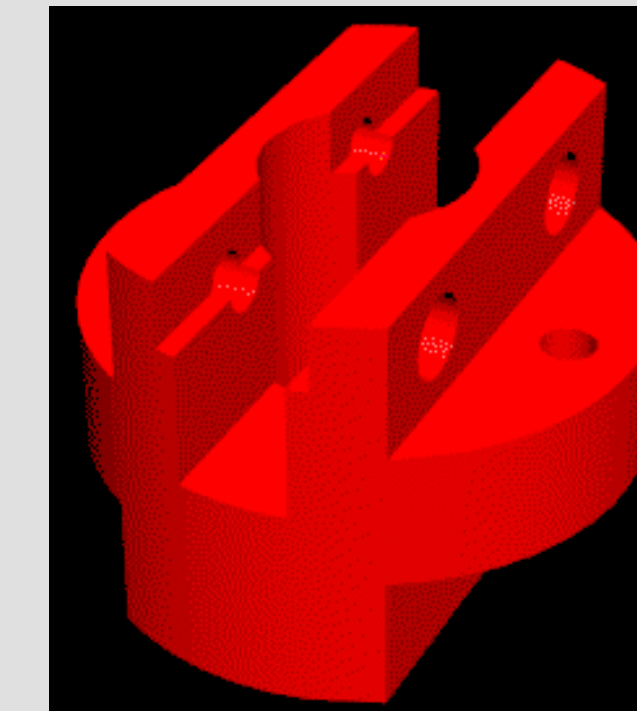


Current and former—

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- **External support:** AFOSR, AFRL, ARO, DARPA, General Motors, Great Game Products, IBM, Martin Marietta, NIST, Northrop Grumman, NSF, ONR, Texas Instruments

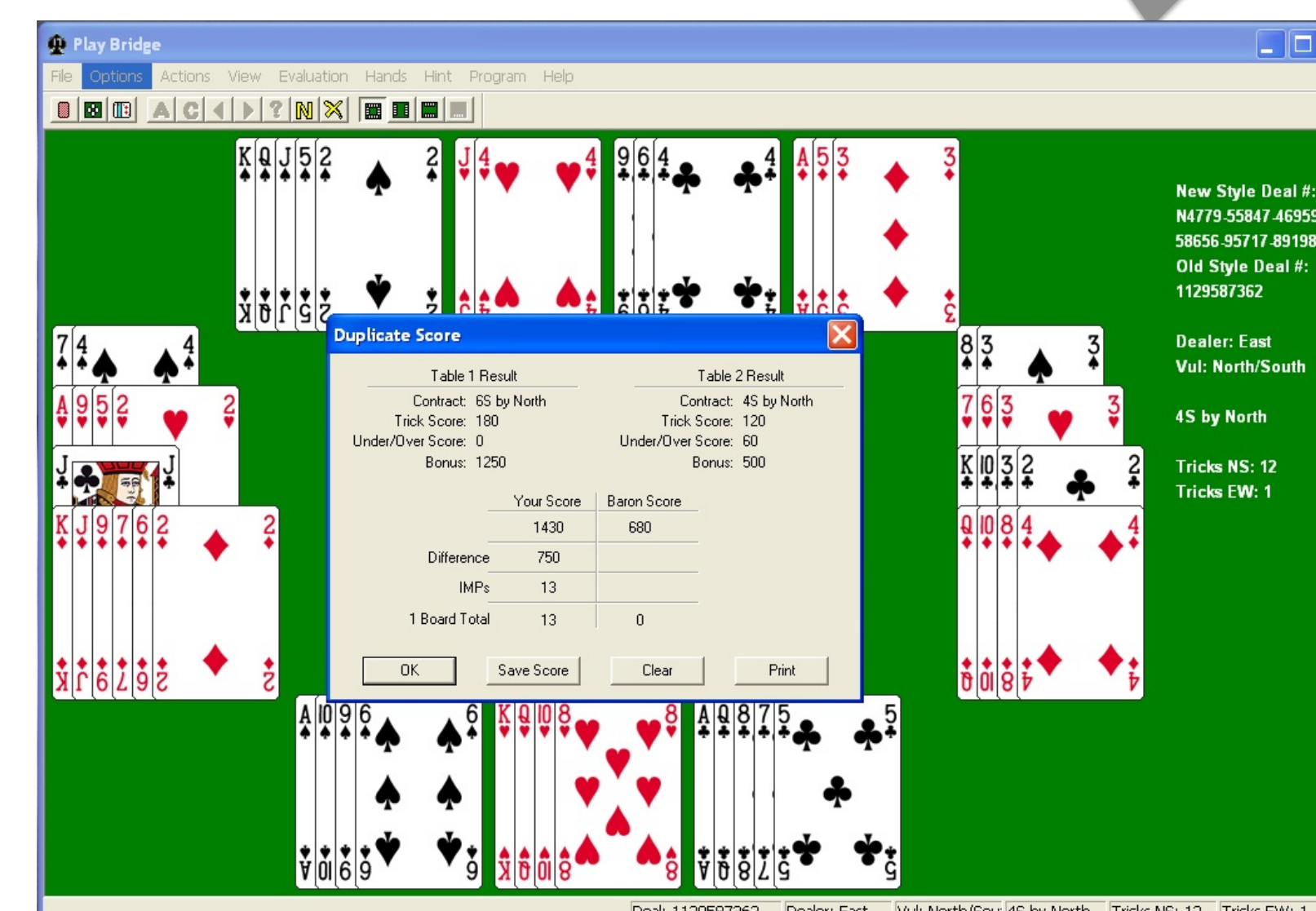
Process planning and manufacturability analysis

- SIPP (1985), IMACS (1992), EDAPS (1996), IPPD (1998)
- Used at NIST, GM, ...
- Best paper, *ASME CIE*, 1994



HTN planning formalism and UMCP planning algorithm (1994)

- Influential Paper Honorable Mention, *ICAPS* 2009



Bridge Baron won the 1997 world computer bridge championship

Non-zero-sum games; modeling evolution of norms in human societies

- paper in *Proc. of the Royal Society*, 2014

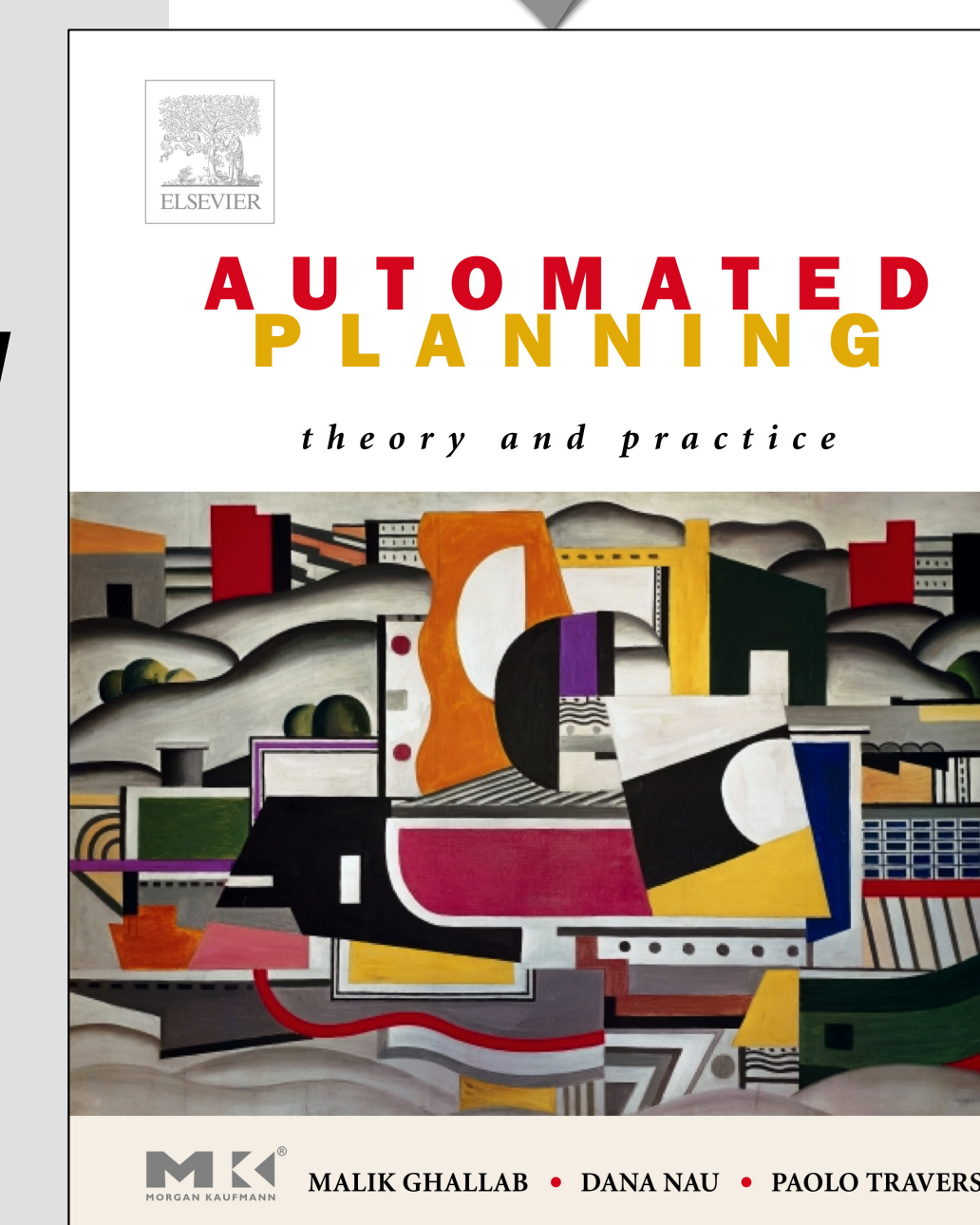
SHOP, SHOP2



- open-source planning systems
- more than 20,000 downloads, many applications
- award in the 2002 *International Planning Competition*

Automated Planning: Theory and Practice (2004)

- standard text on its topic



HGN planning, NDP, other advances

- Best student paper award, *ICAPS* 2014

Automated Planning and Acting

- new textbook, to appear 2016