

Faculty of Computer Science 2006–2007 Seminar Series

## Poker for Fun and Profit (and Intellectual Challenge)

By

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This presentation describes recent work at the University of Alberta towards creating a program that can play poker at a world-class human level. The focus of the presentation will be on the general intellectual challenges that must be met to achieve this goal. It will include a summary of our work on the "PSOpti" series, which won a best paper prize at IJCAI 2003 and won the poker-bot competition at AAAI in 2006. PSOpti computes a Nash Equilibrium for a highly abstracted version of poker and applies the resulting strategy to the full game. It will also outline our current line of research, which abandons Nash Equilibria in favour of opponent modelling. The presentation will be informal and accessible to a wide audience.

No knowledge of poker or game theory will be assumed.

