In recent years, poker has emerged as an important, visible challenge problem for the field of AI. Just as the development of world-class chess-playing programs was considered an important milestone in the development of intelligent computing, poker is increasingly being seen in the same way. An important differentiating feature of poker is the presence of imperfect information: players do not know what cards the other players have. Hence, traditional AI game-playing techniques do not apply and novel methods are required.

The AAAI Computer Poker Competition, now in its third year, showcases state-of-the-art intelligent programs for playing poker. This is the premiere venue for demonstrating poker-playing software systems, as exemplified by the previous years’ competitions. The 2007 competition featured 43 poker-playing programs submitted from 7 countries.

This is an open invitation to anyone who would like to participate in the Third AAAI Computer Poker Competition, to be held from July 15-16, 2008, at the Twenty-Third AAAI Conference on Artificial Intelligence in Chicago, Illinois. To encourage the submission of entries, conference attendance will not be required, and an entry fee will not be charged. However, we plan to have a poster session during the conference where competitors will be given a chance to present their research to the other competitors as well as other conference attendees.

**Competition Formats**

The poker variant considered in the 2008 competition will be Texas Hold’em poker. The competition will build on the success of the previous years’ two-player (heads-up) competitions, with both limit and no-limit betting structures. New this year will be a multiplayer competition. We expect this addition to significantly spur the development of new techniques since presently the most successful solution techniques for two-player games do not apply to multiplayer games.

**Registration Information**

In order to participate, a statement of interest must be sent to Andrew Gilpin (gilpin@cs.cmu.edu) by April 1, 2008. This e-mail should include the names of the competitors, the affiliation, and in which of the competitions (heads-up limit, heads-up no-limit, multiplayer limit) they will participate. The final bots must be submitted by June 1, 2008. In order to facilitate ongoing research, we will make the submitted entries available in a benchmark server that will be accessible to the other participants of the competition.

If you have any questions or comments about the AAAI Computer Poker Competition, we encourage you to address them to the Competition Chair, Andrew Gilpin (gilpin@cs.cmu.edu), or to participate in the competition’s online discussion forum (aicml-poker.cs.ualberta.ca/bb/). David Parkes (parkes@eecs.harvard.edu) will be serving in the role of Arbiter to verify the fairness of the competition.

**Competition Website**

All of the software needed for the competition is open-source, and the source code, rules of the competition, and other information may be found at the competition website.

**Acknowledgements**

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**Inquiries**

Additional information may be obtained by contacting the Competition Chair:

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Carnegie Mellon University  
5000 Forbes Avenue  
Pittsburgh, PA 15213

**Important Dates for Application Submission**

April 1, 2008: Statement of Interest E-mail Due  
June 1, 2008: Final Bots Must Be Submitted  
July 15-16, 2008: Computer Poker Competition