**AAAI Game Program Overview**

1997: Hall of Champions
1998: Hall of Champions
2005: Game Playing Competition
2006: General Game Playing Competition
Poker Competition
2007: General Game Playing Competition
Computer Poker Competition
Man Versus Machine Poker Challenge
Trading Agent Competition
2008: General Game Playing Competition
Computer Poker Competition
Trading Agent Competition
2010: General Game Playing Competition
Computer Poker Competition
2011: General Game Playing Competition
Computer Poker Competition
2012: General Game Playing Competition
Computer Poker Competition and Symposium
2013: General Game Playing Competition
Computer Poker Competition and Symposium
Trading Agent Competition
2014: Computer Poker Competition and Workshop
2015: Open House (included game demos)

**Detail from conference programs:**

**1997**

***Hall of Champions***
The AAAI Hall of Champions is an exhibition of game-playing programs, focusing (though not exclusively) on those that compete at or near the human world-champion level.

The fundamental goal of the Hall of Champions is to educate the public about AI problems, methods, and successes. We want to convey the following points:

• Successful game-playing programs are a success of AI.
• Chess is only one among many successful game-playing programs.
• Some games are solved mathematically; some are not solved, but programs are better than any human; some programs are competing at the world champion level; some are approaching that level; and in some cases we are not even close.
• There are concepts from AI that help people understand why some problems are easy and some are hard: game tree, branching factor, search, evaluation, etc.

The Hall of Champions will be open during exhibit hours (see the schedule below).

AAAI-97 attendees will be able to interact with these programs in a variety of ways. First, all of the programs themselves will be available during the conference and attendees will be able to compete against them. Second, many of the programs' authors will be available to discuss both the technical issues involved in creating the programs and the social issues involved in introducing world-class computer players into tournament play. And finally, human experts will be on hand to play a series of challenge matches against the programs themselves.

The Hall of Champions includes a spectators' area where AAAI attendees can view these matches as they progress. Admittance to the Hall of Champions is included in the technical program registration fee or the on- site exhibits-only registration fee. High-school students are welcome and will be admitted without fee upon presentation of a valid high-school student ID. Children under 12 will also be admitted without fee, but must be accompanied by an adult conference registrant.

Disclaimer
This is an educational exhibition, not a competition. The programs and humans participating in the Hall of Champions are all outstanding; each participant may or may not be the human or computer champion of the game. The persons or programs currently holding championships are determined by the governing organizations of the various games. Participation in the AAAI Hall of Champions has been determined primarily by excellence of play, but also by suitability for our educational mission and by the scheduling constraints of the event.

*Expert Players Schedule*

Tuesday, July 29
10:00 am Backgammon—Malcolm Davis
12:30 pm Bridge—Jeff Meckstroth & Eric Rodwell
2:30 pm Checkers—Ron King

Wednesday, July 30
9:00 am Chess—Gabriel Schwartzman
11:40 am Games Panel—Organized by Matthew L. Ginsberg
1:00 pm Scrabble—Adam Logan
3:00 pm Go—Janice Kim

Thursday, July 31
10:00 am Othello—Tetsuya Nakajima and David Parsons

**1998**

***Hall of Champions***

Man versus machine — who is better? In artificial intelligence, this battle is usually carried out by playing a game. In the short lifespan of computing science and artificial intelligence, considerable effort has been devoted to creating game-playing programs capable of meeting and exceeding human abilities. A scorecard of computer accomplishments in this area might read as follows:

■ Solved—Computers can play some games perfectly (Connect-4 and Go Moku, for example).
■ Computer Champions—Computers are indisputably better than all humans in games such as Checkers and Othello.
■ Undecided—It is not clear whether man or machine is better in games such as Backgammon, Chess, and Scrabble.
■ Emerging—Great strides have been made recently in Bridge and Poker, with the prospects of a computer program being a worthy challenger to the human world champion only a few years away.
■ Human dominance—Some games have been resistant to progress. For example, research into achieving high-performance Go programs is still in its infancy.

The Hall of Champions presents several game-playing exhibitions. Competitions between evenly matched opponents offer the most interest, as evidence by last year's chess match between Garry Kasparov and IBM's Deep Blue. This year, AAAI is highlighting two undecided games: Backgammon and Scrabble. Who is better at Backgammon? Gerry Tesauro's TD-Gammon or world champion Malcolm Davis? Who is better at Scrabble? Brian Sheppard's Maven or Grandmaster Adam Logan? Both matches will be played over several days, allowing for enough games to be played to get more insight into whether man or machine is the better player.

The Hall of Champions also features exhibitions in the emerging games of Bridge and Poker, as well as in Go.

AAAI-98 attendees will be able to interact with these game-playing programs in a variety of ways. First, attendees can watch the competitions. All games will have commentary provided by both the game programmer and the human opponent. Second, most of the programs will be available during the conference for attendees to play against them. Finally, the pro- grams' authors will be available to discuss both the technical issues involved in creating the pro- grams and the social issues involved in introducing world-class computer players into tournament play.

The Hall of Champions includes two spectators' areas where AAAI attendees can view matches as they progress. The Hall of Champions will be open during exhibit hours (see schedule below). Admittance to the Hall of Champions is included in the technical program registration fee or the onsite exhibits-only registration fee. High School students are welcome and will be admitted without fee upon presentation of a valid high school student ID card. Children under 12 will also be admitted without fee, but must be accompanied by an adult conference registrant.

Disclaimer
This is an educational exhibition, not a competition. The programs and humans participating in the Hall of Champions are all outstanding; each participant may or may not be the human or computer champion of the game. The persons or programs currently holding championships are determined by the governing organizations of the various games. Participation in the AAAI Hall of Champions has been determined primarily by excellence of play, but also by suitability for our educational mission and by the scheduling constraints of the event.

*Expert Players Schedule*

Tuesday, July 28
■ 10:00 AM – 12:00 PM: Bridge: GIB vs Zia Mahmoud & Michael Rosenberg
■ 10:00 AM – 6:00 PM: Backgammon: TD Gammon vs Malcolm Davis
■ 12:00 PM – 6:00 PM: Scrabble: Maven vs Adam Logan
■ 4:30 PM – 5:30 PM: Panel Discussion, "AI Game-Playing Techniques: Are They Useful for Anything Other than Games?"

Wednesday, July 29
■ 12:00 PM – 4:00 PM: Backgammon: TD Gammon vs Malcolm Davis
Go: Many Faces of Go vs James Kerwin
■ 6:00 PM – 10:00 PM: Scrabble: Maven vs Adam Logan
Bridge: Bridge Baron

Thursday, July 30
■ 10:00 AM – 2:00 PM: Scrabble: Maven vs Adam Logan
■ 10:00 AM – 12:00 PM: PM: Poker: Loki

**2005**

***Game Playing Competition***

The Game Playing Competition will be held in the Washington Room on Sunday from 6:00 – 9:00 PM and Monday from 10:00 AM – 6:00 PM.

General game players are computer systems able to accept formal descriptions of arbitrary games and able to play those games effectively without human intervention. General game playing systems are characterized by their use of general cognitive information-processing technologies (such as knowledge representation, reasoning, learning, and rational behavior). Unlike specialized game playing systems (such as Deep Blue), they do not rely on algorithms designed in advance for specific games.

The Competition

The AAAI competition is designed to test the abilities of general game playing systems by comparing their performance on a variety of games. The competition consists of two phases: a qualification round and a runoff competition.

In the qualification round, entrants play several different types of games, including single player games (such as maze search) and multiplayer games (such as tic-tac-toe or some variant of chess), including games with both competitors and cooperators. In some cases, the game is exhaustively searchable (as in tic-tac-toe); in other cases, this is not possible (as in chess). Players have to handle all of these possibilities. Entrants are evaluated on the basis of consistent legal play and ability to attain winning positions; the best advance to the second round.

In the runoff round, the best of the qualifiers are pitted against each other in a series of games of increasingly complexity. The entrant to win the most games in this round will be the winner of the overall competition.

Note that, prior to the competition, players are told nothing about the games to be played. The rules of all games are transmitted to the players electronically at the beginning of each game. A general game playing system must be able to read the rules for each game, receive runtime information from the game manager, and inform the manager of its moves.

**2006**

***General Game Playing Competition***

The General Game Playing Competition will take place Monday through Wednesday, July 17-19, in the Harborside room, Upper Level, World Trade Center.

General game players are systems able to accept declarative descriptions of arbitrary games at "runtime" and able to use such descriptions to play those games effectively without human intervention. Unlike specialized game players, such as Deep Blue, general game players cannot rely on algorithms designed in advance for specific games. General game playing performance requires intelligence on the part of the game player and not just intelligence on the part of the programmer of the game player. In order to perform well, general game players must incorporate various Artificial Intelligence technologies, such as knowledge representation, reasoning, learning, and rational decision making; and these capabilities have to work together in integrated fashion. While general game playing is a topic with inherent interest, work in this area has practical value as well. The underlying technology can be used in a variety of other application areas, such as business process management, electronic commerce, and military operations.

The Competition
The AAAI competition is designed to test the abilities of general game playing systems by comparing their performance on a variety of previously unseen games. The 2006 competition

consists of four rounds of matches held during May-July 2006, with the last round and a championship match held in Boston at AAAI. Over the four rounds, each general game player will play approximately 80 matches, and the combined scores from these matches will determine the finalists in the championship match. The winner of the championship match will be the winner of the competition, and the programmer(s) of the winning player will be awarded the $10,000 prize.

Entrants will play a wide variety of competitive and cooperative games, including single player games (Towers of Hanoi, Blocks World), two player games (such as Chess) and many-player games (e.g. Chinese Checkers). In some cases, the games may be exhaustively searchable in the time allowed; in other cases, this is not possible. General game players must handle all of these possibilities.

Note that, prior to the competition, players are told nothing about the games to be played. The rules of all games are transmitted to the players electronically at the beginning of each match. A general game playing system must be able to read the rules for each game, receive runtime information from the game manager, decide on appropriate moves, and inform the manager of its decisions.

***Poker Competition***

The Poker Competition will take place Monday through Wednesday, July 17–19, in the Dartmouth room on the Upper Level of the World Trade Center.

Recorded runs of a Texas Hold-Em game played at the University of Alberta, Canada will be shown and interactive demonstrations will be available for conference attendees to play against the bots. There will be a connection from the AAAI interface to Poker Academy showing all three bots on display. In addition, three academic posters will be on display from Monash University, Carnegie Mellon University, and the University of Alberta.

**2007**

***General Game Playing Competition***

The General Game Playing Competition will be held Sunday–Monday, July 22–23, in the Prince of Wales room and the follow-up Human Versus Machine Exhibition will be held Tuesday–Thursday, July 24–26, in Plaza A.

General game players are systems able to accept declarative descriptions of arbitrary games at “runtime” and able to use such descriptions to play those games effectively without human intervention.

Because game descriptions are presented at runtime, unlike specialized game players such as Deep Blue, general game players cannot rely on algorithms designed in advance for specific

games. Instead, to perform well general game players must incorporate various artificial intelligence technologies and techniques such as knowledge representation, reasoning, learning, and rational decision-making. Moreover, they must do so in an integrated fashion.

While general game playing is a topic with inherent interest, work in its area has practical value as well. Its underlying technology can be used in a variety of other application areas, such as business process management, electronic commerce, and military operations.

The Competition
This year's AAAI competition is designed to test the abilities of general game playing systems by comparing their performance on a variety of previously unseen games. The 2007 competition will consist of four rounds of competition held during June 2007, with a final championship round to be held in Vancouver at the AAAI. Over the four rounds, each general game player will play approximately 80 matches, where the combined scores accumulated during those matches will be used to determine player rankings as well as the finalists in the championship round. The winner of the championship round will be crowned the winner of the competition, and its programmer(s) will be awarded a $10,000 prize. Additionally, this year's winner will be given the opportunity to compete in a special general-game-player-versus-human exposition match. AAAI gratefully acknowledges the generous contribution of Michael Genesereth, who has made this award possible.

Entrants will compete on a wide variety of games organized into taxonomies de- signed to isolate features of general games that are both exploitable and scientifically interesting. Examples of such taxonomies include number of players, branching fac- tor, repeated states, and decomposability into independent subgames. Entrants will be expected to play games that require both competition and cooperation, as well as games that may not be exhaustively searchable in the time allowed. Prior to competition, entrants will be told nothing about the games that they will play beyond the taxonomies that they will be organized into. Instead, the rules for all games will be transmitted to players electronically at the beginning of each match.

***Computer Poker Competition***

The Computer Poker Competition will be held Tuesday–Thursday, July 24–26 in Plaza B.

For the second annual AAAI Computer Poker Competition, 28 teams from 10 countries will develop computer programs for playing heads-up limit and no-limit Texas Hold'em. Programs will be judged based upon their robustness (ability to beat any opponent head-to-head) and their ability to learn (to exploit weaker opponents for more money). The University of Alberta is providing 34 months of computer time to allow each program to play millions of hands. At AAAI, the results, highlighted hands, and posters describing the bots will be presented. Visitors will have an opportunity to play against some of the submitted poker programs.

***Man Versus Machine Poker Challenge***

The Man Versus Machine Poker Challenge will be held Monday, July 23, from 12:00 PM–7:00 PM, in Regency B and Tuesday, Ju- ly 24, from 9:00 AM–5:00 PM, in Plaza B.

AAAI will play host to the first scientific man versus machine challenge in poker. Poker is a game of skill and luck. A "short" match, even one of 10,000 hands, may not be enough to identify the better player. At AAAI, two professional poker players (Phil Laak and Ali Esmali) will play a duplicate match against two copies of the University of Alberta Polaris poker program. There will be four sessions played, each with $5,000 at stake. In a session, each human plays 500 hands against a copy of Polaris. However, the cards dealt in the first match to the human will be dealt to the computer in the second match, and vice versa. The result of the session is the sum of the two humans' scores versus the sum of the two programs' scores. This format, inspired by the rules of duplicate bridge, significantly reduces the luck element, increasing the chances that the best team will win based on skill.

The matches will be played in front of an audience, and the human competitors will be encouraged to think out loud. The result will be entertaining, and give insights as to the state of the art in AI technology for a challenging imperfect information domain.

***Trading Agent Competition***

The Trading Agent Competition will be held Tuesday–Thursday, July 24–26, in Plaza C. The annual Trading Agent Competition (TAC) pits agents from research groups around the world against each other in challenging market-trading domains. The 2007 tournament features a supply chain management (SCM) game, as well as a new game in the domain of market design. In TAC/SCM, agents representing PC manufacturers bid for customer orders, negotiate with suppliers for components, and manage their production schedules in order to maximize profits.

The 2007 TAC/SCM tournament comprises a main event for the SCM game, and two special challenge divisions focusing on specialized tasks: price forecasting and long-term procurement. In a new market design game (dubbed "CAT," or reverse TAC), the agents represent market specialists who compete by setting rules and matching policies to attract traders and mediate profitable trades.

Preliminary rounds for TAC-07 were held during June and July, with final rounds to be held at the AAAI-07 conference, starting Monday at the workshop on Trading Agent Design and Analysis, and continuing Tuesday and Wednesday during the main conference. More details, including game rules and the call for participation can be found at www.sics.se/tac.

**2008**

***General Game Playing Competition***
Tuesday – Thursday, July 15 – 17 Room CC22, Level 2

General game players are systems able to accept declarative descriptions of arbitrary games at "runtime" and able to use such descriptions to play those games effectively without human intervention. Because game descriptions are presented at runtime, unlike specialized game players such as Deep Blue, general game players cannot rely on algorithms designed in advance for specific games. Instead, to perform well general game players must incorporate various artificial intelligence technologies and techniques such as knowledge representation, reasoning, learning, and rational decision-making. Moreover, they must do so in an integrated fashion.

While general game playing is a topic with inherent interest, work in its area has practical value as well. Its underlying technology can be used in a variety of other application areas, such as business process management, electronic commerce, and military operations.

This Year's Competition
This year's AAAI competition is designed to test the abilities of general game playing systems by comparing their performance on a variety of previously unseen games.The 2008 competition will consist of three rounds of competition held during June 2008, with a final championship round to be held in Chicago at the AAAI. Over the four rounds, each general game player will play approximately 80 matches, where the combined scores accumulated during those matches will be used to determine player rankings as well as the finalists in the championship round. The winner of the championship round will be crowned the winner of the competition, and its programmer(s) will be awarded a $10,000 prize.

Entrants will compete on a wide variety of games organized into taxonomies designed to isolate features of general games that are both exploitable and scientifically interesting. Examples of such taxonomies include number of players, branching factor, repeated states, and decomposability into independent subgames. Entrants will be expected to play games that require both competition and cooperation, as well as games that may not be exhaustively searchable in the time allowed. Prior to competition, entrants will be told nothing about the games that they will play beyond the taxonomies that they will be organized into. Instead, the rules for all games will be transmitted to players electronically at the beginning of each match.

***Computer Poker Competition***
Tuesday – Wednesday, July 15 – 16, Room CC21, Level 2

For the Third Annual AAAI Computer Poker Competition, 14 teams from 7 countries will develop computer programs for playing heads-up limit and no-limit Texas Hold'em. New for this year's competition, there will also be a 6-player limit Texas Hold'em competition. Programs will be judged based upon their robustness (ability to beat any opponent head-to-head) and/or their ability to learn (to exploit weaker opponents for more money). At AAAI, the results, highlighted hands, and posters describing the bots will be presented. Visitors will have an opportunity to play against some of the sub- mitted poker programs.

***Trading Agent Competition***
Monday – Wednesday, July 14 - 16 Room CC20, Level 2

The annual Trading Agent Competition (TAC) pits agents from research groups around the world against each other in challenging market trading domains. The 2008 tournament features a Supply Chain Management (SCM) game and a second game in the domain of market design, dubbed "CAT" (the reverse of TAC). InTAC/SCM, agents representing PC manufacturers bid for customer orders, negotiate with suppliers for components, and manage their production schedules in order to maximize profits. The 2008 TAC/SCM tournament comprises a main event for the SCM game, and two special challenge divisions focusing on specialized tasks: price forecasting and long-term procurement. In CAT, the agents represent market specialists who compete by setting rules and matching policies to attract traders and mediate profitable trades. Preliminary rounds forTAC-08 will be held during June and July, with final rounds to be held starting Monday, July 14, at the workshop on Trading Agent Design and Analysis, and continuing Tuesday and Wednesday during the main conference. More details, including game rules and the call for participation can be found at www.sics.se/tac.

**2010**

***AAAI Fifth Annual General Game Playing Competition***
This year's AAAI competition is designed to test the abilities of general game players by comparing their performance on a variety of previously unseen games. The 2010 championship will be held at the AAAI conference in Atlanta. Preliminary rounds will take place on Monday, July 12; semifinals and finals will take place on Tuesday, July 13. All teams must register by June 30 in order to compete. See games.stanford.edu for details.

**Computer Poker Competition**
Tuesday, July 13, Roswell I, Eighth Floor

For the Fifth Annual AAAI Computer Poker Competition teams will develop programs for playing heads-up Texas Hold-Em, both limit and no-limit, and 3-player ring limit Texas Hold'em. Programs will be judged based upon their robustness (ability to beat any opponent head-to-head) and/or their ability to learn (to exploit weaker opponents for more money). The winner of a competition will be determined by matches between bots that were submitted to that specific competition. If resources allow, unofficial results will also include matches between all pairs of bots in a division. At AAAI, the results, highlighted hands, and posters describing the bots will be presented. Visitors will have an opportunity to play against some of the submitted poker programs. AAAI thanks Poker Competition organizer Nolan Bard and David Parkes, who serves as the impartial "arbiter" for the competition, for all their efforts in making this event possible.

**2011**

***AAAI Sixth Annual General Game Playing Competition***
Program blurb unavailable
See https://aaai.org/Conferences/AAAI/2010/aaai10generalgame.php

***Computer Poker Competition***
Wednesday, August 10, 6:30 PM – 9:30 PM, Grand Ballroom, Street Level

For the Sixth Annual AAAI Computer Poker Competition teams will develop programs for playing heads-up Texas Hold-Em, both limit and no- limit, and 3-player ring limit Texas Hold'em. Programs will be judged based upon their robustness (ability to beat any opponent head-to-head) and/or their ability to learn (to exploit weaker opponents for more money). The winner of a competition will be determined by matches between bots that were submitted to that specific competition. If resources allow, unofficial results will also include matches between all pairs of bots in a division. At AAAI results and posters describing the bots will be presented. AAAI thanks Poker Competition organizers Nolan Bard and Jonathan Rubin for all their efforts in making this event possible, as well as David Parkes, who serves as the impartial "arbiter" for the competition.

**2012**

***AAAI Seventh Annual General Game Playing Competition***
The AAAI General Game Playing Competition will be held Tuesday – Wednesday, July 24–25, in the Grand Ballroom Foyer, Lower Concourse.

This year's AAAI competition is designed to test the abilities of general game players by comparing their performance on a variety of previously unseen games. The competition will consist of two phases. on Monday, July 23, players will participate in preliminary rounds. on Tuesday, July 24, the top four finishers from the preliminary rounds will participate in semifinal and final rounds to determine an overall winner. (Note that, unlike competitions in previous years, there was no competition phase prior to the conference.) See games.stanford.edu for details.

***Computer Poker Competition and Symposium***
The Computer Poker Competition and Symposium will be held Monday, July 23 in Conference C, Mezzanine Level. The Poster Session will be held Tuesday, July 24, in Sheraton Hall, Lower Concourse.

The AAAI Annual Computer Poker Competition, now in its seventh 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 poker variants considered in the 2012 competition will be Texas Hold'em pok- er. The competition will build on the success of the previous years' two-player (heads-up) competitions, with both limit and no-limit betting structures, and last year's three-player limit competition. With many interesting challenges in all three categories, we expect this year's competition to continue to spur the development of new techniques.

The accompanying 2012 Computer Poker Symposium at AAAI will provide a forum where researchers studying Computer Poker and other games of imperfect information can share current research and gather ideas about how to improve the state of the art and advance AI research in these areas. 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. Several important features differentiate poker from other games: the presence of imperfect information (due to hidden cards), stochastic events, and the desire to maximize utility instead of simply winning. Hence, traditional AI game-playing techniques do not apply and novel methods are required. The Computer Poker Symposium will consist of a series of oral presentations, followed by a poster session and discussion. The results of the 2012 AAAI Annual Computer Poker Competition will also be announced during the Symposium. Poster authors will present their work at the AAAI-12 poster reception on Tuesday evening, July 24.

AAAI thanks Poker Competition Cochairs Jonathan Rubin and Eric Jackson for all their efforts in making this event possible, as well as David Parkes, who serves as the impartial "arbiter" for the competition. AAAI gratefully acknowledges the generous contributions of the Steven Kuhn, Pine River Capital, for his sponsorship.

**2013**

***AAAI Eighth Annual General Game Playing Competition***
Tuesday – Wednesday, July 16 – 17, Grand Ballroom Foyer, 2nd Floor

This year's General Game Playing competition is designed to test the abilities of general game players by comparing their performance on a variety of previously unseen games. The competition will consist of two phases. On Tuesday, July 16, players will participate in preliminary rounds. On Wednesday, July 17, the top four finishers from the preliminary rounds will participate in semifinal and final rounds to determine an overall winner.) See games.stanford.edu for details. After the competition, as in past years, the winning program will be pitted against a human in a best-of-three carbon-vs-silicon match.

***Computer Poker Competition***
Tuesday, July 16, 5:45 – 7:30 PM, Poster Session, Evergreen Ballroom, Lobby Level
The AAAI Annual Computer Poker Competition, now in its eighth year, showcases state-of-the-art intelligent programs for playing poker. The poker variants considered in the 2013 competition will consist of three variants of Texas Hold'em poker — two-player (heads-up) with both limit and no-limit betting structures, and three-player limit. With many interesting challenges in all three categories, we expect this year's competition to continue to spur the development of new techniques for playing large games of imperfect information.

The accompanying 2013 Computer Poker Workshop (W4) that will take place on Sunday, July 14 at AAAI will provide a forum where researchers studying Computer Poker and other games of

imperfect information can share current research and gather ideas about how to improve the state of the art and advance AI research in these areas. 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. Several important features differentiate poker from other games: the presence of imperfect information (due to hidden cards), stochastic events, and the desire to maximize utility instead of simply winning. Hence, traditional AI game-playing techniques do not apply and novel methods are required. The Computer Poker Workshop will consist of a series of oral presentations, followed by a poster session and discussion. The results of the 2013 AAAI Annual Computer Poker Competition will also be announced during the workshop. Some poster authors will also present their work at the AAAI-13 poster reception on Tuesday evening, July 16.

AAAI thanks Poker Competition cochairs Neil Burch and Eric Jackson for all their efforts in making this event possible, as well as David Parkes, who serves as the impartial "arbiter" for the competition. AAAI also gratefully acknowledges the generous sponsorship of Steve Kuhn of Pine River Capital.

***14th Annual Trading Agent Competition (TAC 2013)***
July 15: Collocated AAAI TADA Workshop
July 16: Grand Ballroom Foyer, 2nd Floor, Hyatt

The Trading Agent Competition is an international forum aiming to encourage and promote high quality research in the technology underlying trading agents. The competition has been held annually since 2000 and has attracted participants from multiple institutions worldwide. This year TAC is collocated with AAAI and its workshop TADA (the Workshop on Trading Agents Design and Analysis) will be held on Monday July 15. The semifinals and finals of TAC will take place on July 15 and 16. The competition will involve two scenarios:

*Power TAC*
Sustainable energy systems of the future will need more than efficient, clean, low-cost, renewable energy sources; they will also need efficient price signals that motivate sustainable energy consumption as well as a better real-time alignment of energy demand and supply. In Power TAC, agents act as retail brokers in a local power distribution region, purchasing power from a wholesale market as well as from local sources, such as homes and businesses with solar panels, and selling power to local customers and into the wholesale market. Retail brokers must solve a supply-chain problem in which the product is infinitely perishable, and supply and demand must be exactly balanced at all times.

*TAC Ad Auctions*
In the TAC/AA game, agents representing Internet advertisers bid for search-engine ad placement over a range of interrelated keyword combinations. A back-end search-user model translates placement over each simulated day to impressions, clicks, and sale conversions,

yielding revenue for the advertiser. Advertiser strategies combining online data analysis and bidding tactics compete to maximize profit over the simulated campaign horizon.

**2014**

**Computer Poker Competition and Workshop**
The AAAI Annual Computer Poker Competition showcases state-of-the-art intelligent programs for playing poker. The 2014 competition will consist of four poker variants — two-player Texas Hold'em with both limit and no-limit betting structures, three-player limit Texas Hold'em, and three-player Kuhn poker. With many interesting challenges in all four categories, we expect this year's competition to continue to spur the development of new techniques for playing large games of imperfect information. The accompanying 2014 Computer Poker Workshop (W4) that will take place on Sunday, July 27 in 205A will provide a forum where researchers studying computer poker and other games of imperfect information can share current research and gather ideas about how to improve the state of the art and advance AI research in these areas. The results of the 2014 AAAI Annual Computer Poker Competition will be announced during the workshop. Some poster authors will present their work at the AAAI-14 poster reception on Tuesday evening, 5:30 – 7:00 PM, Hall 200B.

**2015**

***AAAI-15 Open House***
Monday, January 26
Zilker Ballroom 1-3, First Level

The 2015 AAAI Open House will be held on Monday, January 26 in the Zilker Ballroom. There is no cost to attend this event, and it is open to the public. During the open house there will be demos and posters on many areas and topics including robotics, games, agents, and many others. Speakers Moshe Vardi and Stuart Russell will address the social consequences of AI. We look forward to seeing you there with your friends and family.

For up-to-date open house information, see movingai.com/AAAI15/openhouse.html

*Open House Exhibits*
Exhibits will be held in Zilker 1–2 and Foyer, from 9:00 AM – 5:30 PM. Open House Exhibits will include Robotics exhibits, the RoboCup Exhibition, Virtu- al Agents Demos, and the posters and demos (including the Games Showcase) listed below.

*Open House Invited Presentations*
Open House Invited Presentations will be held in Zilker 3

*The Future of (Artificial) Intelligence*
Stuart Russell (University of California, Berkeley)
1:00 PM

The news media in recent months have been full of dire warnings about the risk that AI poses to the human race, coming from well-known figures such as Stephen Hawking and Elon Musk. Should we be concerned? If so, what can we do about it?

*If Machines Are Capable of Doing Almost Any Work Humans Can Do, What Will Humans Do?*
Moshe Vardi (Rice University)
4:30 PM
Over the past 15 years artificial intelligence (AI) has made remarkable progress. While AI has been proven to be much more difficult than believed by its early pio- neers, its inexorable progress over the past 50 years suggests that H. Simon was probably right when he wrote in 1956 “machines will be capable ... of doing any work a man can do.” I do not expect this to happen in the very near future, but I do believe that by 2045 machines will be able to do a very significant fraction of the work that humans can do. The following question, therefore, seems to be of paramount importance. If machines are capable of doing almost any work humans can do, what will humans do?

***Open House Poster Presenters***
A Multi-Pass Sieve for Name Normalization
Jennifer D'Souza, University of Texas at Dallas

A Multivariate Timeseries Modeling Approach to Severity of Illness Assessment and Forecasting in ICU with Sparse, Heterogeneous Clinical Data
Marzyeh Ghassemi, Tristan Naumann, and Mengling Feng, MIT

Leveraging Multi-modalities for Egocentric Activity Recognition Peng-Ju, Hsieh, National Taiwan University

Goal Recognition Design
Sarah Keren and Avigdor Gal, Technion - Israel Institute of Technology

Building a Professor Recommendation System Using Clustering
Mackenzie Leake, Scripps College

Fractal Reasoning
Keith McGreggor, Georgia Institute of Technology

Borrowing from Biology: Using Genetic Algorithms and Hierarchical Genetic Algorithms to Create Technology
Jennifer Seitzer, Rollins College

Incentivizing Users for Balancing Bike Sharing Systems
Marco Santoni, ElectricFeel

An Agent-Based Model of the Emergence and Transmission of a Language Sys- tem for the Expression of Logical Combinations
Josefina Sierra-Santibanez, Technical University of Catalonia

Going Beyond Literal Command-Based Instructions: Extending Robotic Natural Language Interaction Capabilities
Tom Williams, Tufts University

***Open House Demo Presenters***
Plan, Repair, Execute, Explain - How Planning Helps to Assemble your Home Theater
Pascal Bercher, Ulm University

Computer Playing Poker (Game Showcase)
Michael Bowling, Rob Holte, Nolan Bard, Neil Burch, Michael Johanson, Trevor Davis, and Dustin Morrill, University of Alberta

Cogsketch: Sketch Understanding for Cognitive Science and Education
Maria Chang, Northwestern University

Samsung Tune: A Scalable Song Recommender System
Maryam Esmaeili, Samsung Research America

Angry Birds AI and Snap! (Game Showcase)
Xiaoyu Ge and Jochen Renz, Australian National University

MoHex, A Strong Hex Player (Game Showcase)
Ryan Hayward, University of Alberta

KU Leuven Innovation Lab for High School Students
Wannes Meert, Guy Van den Broeck, and Jan Van Haaren, KU Leuven

2012 BotPrize Champion: Human-like Bot for Unreal Tournament (Game Showcase)
Jacob Schrum, Southwestern University and Risto Miikkulainen, The University of Texas at Austin

Classifying Guitar Tab Difficulty
Ankit Tandon, University of Texas at Austin

We Are Watson Labs
Dan Tecuci and Rob Turnkett, IBM Watson

Fittle, A Mobile Health & Wellness App
Michael Youngblood, Palo Alto Research Center (PARC, a Xerox company)

Fuego Go Program (Game Showcase)

Yeqin Zhang, University of Alberta