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Preface to Workshop Notes

Welcome to the AAAI-97 Workshop *Deep Blue vs. Kasparov: the Significance for Artificial Intelligence*! The impetus for this workshop is the historic 1996 chess match between Garry Kasparov and the chess playing system Deep Blue. The extensive popular media attention generated as the result of the match has brought issues related to the nature and possibility of intelligence, as well as research in artificial intelligence, once again to the forefront of popular culture. Kasparov himself was quoted in TIME Magazine as one who "sensed a new kind of intelligence across the table".

The theme of the workshop, as suggested in the title, is the significance and ramifications of the now famous chess match for the science of artificial intelligence. On the one hand, the workshop is intended to foster a serious discussion of the issues related to the nature and possibility of intelligence, using Kasparov vs. Deep Blue as the context for this discussion. On the other hand, it is intended to be an opportunity for the computational science community to review and reflect upon the extensive AI research, both past and present, undertaken in order to solve the chess problem.

Each of the papers in these notes addresses one or more of the questions to be discussed in the workshop. These questions include:

- Are there thinking machines? Is Deep Blue one of them?
- What are the sufficient/necessary conditions for "sensing" intelligence?

- What does Kasparov vs. Deep Blue mean to AI? Is Deep Blue "AI"?
- What are the important milestones in the development of chess-playing programs?
- What software technology underlies the best chess playing programs? What is the future of this technology?
- Why the negative emotional reaction to a very notion of artificial intelligence by many philosophers and cognitive scientists?

The organizers hope and expect that the workshop will offer a stimulating and rewarding opportunity for promoting the mutual sharing and clarifying of diverse ideas, and that participants will depart with new set of colleagues, and a refined perspective on the nature of their discipline.

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and Program Chair