

July 9, 2025

Prof. Dr. Kensuke Harada
Fellow, IEEE
Graduate School of Engineering Science
The University of Osaka
1-3 Machikaneyama, Toyonaka 560-8531
Japan

Dear IEEE History Committee,

I would like to very strongly recommend The Honda P2 Walking Humanoid Robot to the IEEE milestone because of its technological and historical values.

- (1) Is suggested wording of the Plaque Citation accurate? Yes
- (2) Is evidence presented in the proposal of sufficient substance and accuracy to support the Plaque Citation? Yes. Obviously, it is a historical milestone. Recently, we can see biped humanoid robots walking and even running very stably. However, it was not true before P2 appeared. When P2 appeared, people all over the world were surprised to see the stable and human-like bipedal gait of P2. P2 often appeared in many TV news. In addition, the paper presented in IEEE ICRA (International Conference on Robotics and Automation) received the best paper award.
- (3) Does proposed milestone represent a significant technical achievement? Yes. Before P2 appeared, the bipedal gait was not stable. P2 is the first to introduce the real-time feedback control of ZMP position. Since this real-time ZMP feedback control was very sophisticated, bipedal gait of Honda's humanoid robot was most stable until ATLAS in Boston Dynamics appeared.
- (4) Were there similar or competing achievements? If so, have the proposers adequately described these and their relationship to the achievement being proposed? No. This is the first self-contained biped humanoid robot that can walk very stably. Before P2, no humanoid robot was self-contained. In addition, all the humanoid robots are bulky and their gait was not stable.
- (5) Have proposers shown a clear benefit to humanity?
Yes.

Sincerely yours,



Kensuke Harada

Director, Robotic Manipulation Research Group

Professor, Graduate School of Engineering Science, The University of Osaka