

THE UNIVERSITY OF MICHIGAN

Regents Communication

ACTION REQUEST

Subject: Report of Faculty Retirement

Action Requested: Adoption of Retirement Memoir

Benjamin J. Kuipers, Ph.D., professor of electrical engineering and computer science in the College of Engineering, retired from active faculty status on May 31, 2024.

Professor Kuipers received his B.A. (1970) degree with high honors in mathematics from Swarthmore College and his Ph.D. (1977) degree in mathematics from the Massachusetts Institute of Technology (MIT). He worked as a research associate at MIT from 1977-1978. He joined Tufts University as an assistant professor in 1978, and the University of Texas at Austin as an associate professor in 1985, where he was promoted to professor in 1992 and served as department chair for computer science from 1997-2001. Professor Kuipers joined the University of Michigan faculty as a professor in 2009.

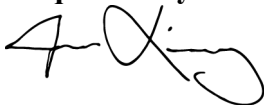
Professor Kuipers' career in artificial intelligence has focused on foundational domains of commonsense knowledge. He developed some of the earliest computational models of the cognitive map: the representation and learning of knowledge of navigational space. He developed robot exploration and mapping methods based on these models. He developed the QSIM representation and algorithm for qualitative simulation of dynamical systems. He has worked on simulated and physical robotic models of developmental learning of the foundations of commonsense knowledge. He treats ethics as an important domain of common sense.

Beginning in 2011 through 2020, Professor Kuipers played a leading role in establishing the University of Michigan Robotics Institute, which later became the Robotics Department in the College of Engineering. At the same time, he became an early and leading voice on the topic of ethics in the fields of artificial intelligence and robotics. In 2020, Professor Kuipers introduced the course Ethics for AI and Robotics. In 2022, he organized the Obert C. Tanner Lecture on Artificial Intelligence and Human Values at the University of Michigan.

Professor Kuipers has authored over 200 technical papers and advised 35 Ph.D. students. He is a fellow of the Association for the Advancement of Artificial Intelligence (AAAI), the Institute of Electrical and Electronics Engineers (IEEE), and the American Association for the Advancement of Science (AAAS).

The Regents now salute this distinguished faculty member by naming **Benjamin J. Kuipers, professor emeritus of electrical engineering and computer science**.

Requested by:



Jon Kinsey
Vice President and Secretary of the University

May 2024