

Editorial

AI Education for the World

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Education in AI is critical to the success of the scientific and technological enterprise of AI. However, since the dawn of AI as a scientific discipline in the 1950s, education in AI has been limited to a small elite group consisting mostly of graduate students in computer science at major universities in advanced countries. The focus of AI education in general has been on training small numbers of students for research and teaching responsibilities in academe and research and development positions in industry and government. Emphasis typically has been on cultivating depth of understanding of AI concepts and methods and rigor in AI methodologies of analysis, modeling, design, experiment, and so on. The need for this kind of deep and rigorous education in AI will not only continue but also grow.

Nevertheless, several factors are converging to change fundamentally some aspects of AI education in the 21st century. First, there is a growing demand for expertise in AI in industry, business, and commerce. Development, integration, and use of AI technologies have now become the new norm in several industries. This is generating not only a larger need for education in AI but also new learning goals. Second, education in AI is spreading widely, from graduate studies to undergraduate programs, from computer science to various disciplines in engineering, mathematics, and science, from major universities to various other types of educational institutions and programs, and from advanced countries to most



*The Association for the
Advancement of Artificial Intelligence
Welcomes the New India Chapter!*

The India chapter was launched on Friday, 2 June,
at the Indian Institute of Technology (IIT) Hyderabad,
with an inaugural lecture
by AAAI President Subbarao Kambhampati
on *The Rise of Artificial Intelligence and
the Challenges of Human-Aware AI Systems*

of the world. This is bringing rapid diversification among both teachers and students of AI. Third, there is a growing need that AI education be available to all citizens so that they can make informed decisions about AI technologies without regard to hype about the wonders of AI wonders or unfounded fears of imagined threats. The success of the scientific and technological enterprise of AI in the long term will require the support of an informed citizenry.

These factors raise profound new questions for education in AI. What kinds of AI knowledge and skills does industry need from our graduates? How do we meet these needs? How do we ensure quality, depth, and rigor of education even as the teachers and students of AI rapidly diversify? How do we make AI education accessible? How do we make it affordable? How do we make it achievable? If we are unwilling or unable to answer these questions, then we run the risk of creating an “AI divide” in which only a small elite has access to the fruits of AI’s suc-

cesses while much of the society is gripped by awe.

To help answer some of these questions, the AI community is exploring new pedagogies and technologies. Thus, I am delighted to bring you this special issue of *AI Magazine* on AI education, which is coedited by Michael Wollowski, Todd Neller, and James Boerkoel. I thank the guest editors for their excellent work and hope that this issue will help foster new thinking on AI education. I would love to hear readers’ feedback on the issue.