Google's 2023 I/O developer conference, its first in-person conference since the pandemic, showcased new technologies and software mostly focused on AI. Many products were inseparable from AI such as immersive view for Google Maps, new features to Bard, new AI writing tools for Google Docs, and much more.

ter in Morocco—student chapters can focus on collaborative growth within the computing community.

Every year ACM acknowledges commendable achievements in the realm of computing education and community engagement through a series of prestigious awards under the umbrella of the ACM Student Chapter Excellence Awards. For the 2022–2023 academic year, UCLA's ACM Student Chapter was recognized for outstanding chapter activities, highlighting their commitment to advancing computer science initiatives. An exceptional digital presence earned the Don Bosco Institute of Technology ACM Student Chapter and PICT ACM Student Chapter at the Pune Institute of Computer Technology the outstanding website award. UC San Diego ACM Student Chapter's award for outstanding recruitment underscores their influence within the student community, while the College of William & Mary ACM-W Student Chapter won for outstanding community service highlighting their positive societal impact. The University of Texas at Dallas ACM Student Chapter's award for outstanding school service showcases their valuable contributions to education.

XRDS invites student chapters to share their latest activities in our upcoming issues. We would love to hear about the great things that your chapter has been up to, and we know that our readers would enjoy learning about them too. Please reach out to us at xrds-magazine@gmail.com

—Gopal Mengi

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MILESTONES

Human-Robot Collaboration

Many ancient civilizations have historical accounts of robots, but technological advancements have only recently made robots an integral part of our daily lives. Since the COVID-19 pandemic, cobots working alongside humans in various work settings have gained popularity across a range of industries.

1954 The first industrial robot, the Unimate, is developed by George Devol and Joseph Engelberger. It was first installed on General Motors' assembly line in 1959 and later became the first mass-produced robot in 1961.

1972 Shakey, the first mobile robot utilizing artificial intelligence, is developed at the Stanford Research Institute (SRI).

1973 Researchers at Waseda University, using sophisticated sensors and actuators, create WABOT-1. It is a full-scale humanoid robot.

1996 J. Edward Colgate and Michael Peshkin, professors at Northwestern University, invent cobots.

1999 Sony introduces AIBO, a robotic dog with advanced sensors, cameras, and AI capabilities. It becomes a popular companion and at the time is a symbol of innovation in robotics.

2000 With its impressive capabilities, Honda's ASIMO, an advanced humanoid robot, represents a significant step in developing robots with human-like abilities.

2002 The Robotic Industries Association, an industry working group, publishes RIA BSR/T15.1, a safety standard for intelligent assist devices.

2003 Kiva Systems (now Amazon Robotics) introduces the Kiva robot to transport goods in warehouses.

2013 Boston Dynamics unveils Atlas, a remarkable humanoid robot that demonstrates outstanding improvements in robot locomotion and agility.

2016 Hanson Robotics releases Sophia, a humanoid robot that displays advances in human-robot interaction and social robotics.

—Deepak Mahto

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