



"I don't remember a time when I wasn't building something."

As a child, James McLurkin was constantly building with LEGO bricks, cardboard boxes, or any other materials he could access. Today, McLurkin continues this tradition. Using Mother Nature as a model, his core research is developing distributed algorithms for multi-robot systems: the software for large swarms of autonomous robots. Inspired by the behavior of ants and bees, the SwarmBots perform individual tasks that collectively contribute to the goals of the group. They were originally created during his five-year post as Lead Research Scientist at iRobot, one of the world's leading robotics companies.

McLurkin holds a S.B. in electrical engineering with a minor in mechanical engineering from MIT (1995), a M.S. in electrical engineering from the University of California, Berkeley (1999), and a S.M. in computer science from MIT (2004). He is currently a Ph.D. candidate in computer science at the Massachusetts Institute of Technology Computer Science and Artificial Intelligence Laboratory (CSAIL). His first robot, Rover, was constructed in 1988, and was quickly followed by many other designs, including the Robotic Ants created at the MIT Artificial Intelligence Lab for his undergraduate thesis.

As an independent consultant, McLurkin has advised many engineering projects for clients such as Walt Disney Imagineering and Sensable Technologies. Since 1995, he has lectured at companies and universities such as the Smithsonian Museum, Harvard University, IBM, and Honda Research and Development. Additionally, he is dedicated to illustrating the fun and excitement in science and engineering, and has taught classes in high school and middle school programs from physics to robotics to civil en...

James McLurkin

Speech Topics

- Technology
- Innovation

