

Mr. Speaker, I ask the House to consider the life of David L. Waltz, who died of brain cancer last month in Princeton, NJ, at age 68. David Waltz was one of the world's leading experts and creative forces in computer science, and a fine example of a researcher, a teacher and mentor, and a life well lived. He was what we talk about when we talk about America's creative spirit and educational excellence and path-breaking industry.

A pioneer in artificial intelligence, David produced early research that led to Internet search engines that we all use. He also invented techniques that allow designers to look at two dimensional data from three dimensional perspectives, and he showed how to extend those constraint-propagation techniques beyond visualization to optimization of scheduling, routing, or building. His ideas and computer techniques of neural networks and machine learning are eagerly applied by computer companies, power companies, medical researchers, and healthcare providers. David's advances made it possible for computers to move beyond laborious bit-by-bit checking and referencing to a fixed checklist and to begin to recognize patterns, whether applied to images or speech or music.

Taught by the renowned Marvin Minsky at Massachusetts Institute of Technology, where David received his Bachelor's and Ph.D. degrees, he went on to teach at the University of Illinois and Brandeis University. As head of the software division of the iconic company Thinking Machines he produced software innovations that have long outlasted that computer company. A decade ago David founded the Columbia University Center for Computational Learning Systems, where he worked until his death.

Surely more important than all the computer ideas, big and small, that he spawned are the many creative people he inspired, taught, and mentored. People who worked with him said everyone can remember a meeting, a conversation, or a simple thoughtful word when David changed one's research direction, career, or entire course of life for the better. In recent weeks his colleagues and students recorded their admiration for David and their sorrow at his death. Phrases like "amazing mentor", "mentor with unreserved support and encouragement", "amazing colleague and boss", and "wise and understanding" appear over and over in their remembrances.

David's colleagues called him a listener who inspired attention, someone who was as eager a listener as a talker, and someone who carried his great stature in the field gently and with genuine humility. He imbued his research teams with optimism by always drawing out merit of the work of others. And he built teamwork by sharing his interests in art, literature, music, and culture well beyond the immediate concerns of the research team. He encouraged his students and colleagues not to narrow their thinking; as a result the group could contribute as much to the treatment of epilepsy as to power grid blackouts. Everything was food for thought and an opportunity for an amusing or inventive insight.

Probably the greatest praise for David's leadership came from women who have worked with him. Some credited him with providing the greatest opportunities for career advancement for women of anyone in the field. David recruited and promoted women not as a crusader for equal rights but because it was for him obviously the right and wise thing to do.

The lessons that teachers, researchers, supervisors--in fact any of us here in this House or elsewhere--can draw from David Waltz are not primarily about computer science and artificial intelligence. They are that the greatest creativity comes from inspiring others; the greatest technique of team-building is listening; the greatest innovation comes from devoting time to others' ideas; and the greatest wisdom is kindness.

I know all this to be true about David Waltz because he was a good friend of mine, and I personally also know he brought all of his wonderful qualities of uplifting and inspiring and nurturing others to his wonderful wife Bonnie and his two children, Jeremy and Vanessa.