

# Teaching kids about complex systems is valuable

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It is amazing that in a world progressing so rapidly in technology, the U.S. supply of computer scientists should be in such a state of crisis. The National Bureau of Labor and Statistics estimates that there will be 1.5 million computer science jobs in the U.S. by 2018. Of those, we will be able to fill less than 30 percent with U.S. graduates. We, as a nation, are not producing enough computer scientists to meet the current demands in our country's job market, much less its future demands. And, unlike other areas of science and engineering, the number of computer science graduates is not increasing yearly to help us meet this demand.

As our kids head back to school in a week or two, many will be ending a summer thoroughly or partially engaged in computers, smartphones and games. It's ironic that while nearly every elementary, middle and high school student can use a computer to do things like explore the Internet, create a document or play a game, few are preparing to create new tools to push the technology further and use computers' vast power to address the complex problems facing the world today — climate change, ecological distress, the spread of diseases, financial unpredictability and more.



Science in a Complex World:  
Today's complex problems  
demand more (and better)  
computational thinkers

Maureen Psaila-Dombrowski. Courtesy  
Laura Ware