

2019 Wolfram Innovator Award Winners



WOLFRAM BLOG



Wolfram Technology Conference 2019: It's a Wrap!

November 1, 2019 — [Danielle Rommel](#), Director of Outreach and Communications, Public Relations

It's been a whirlwind week of talks, training, workshops, networking and special events, and we've just closed another successful [Wolfram Technology Conference](#)! The week offered a multitude of opportunities for attendees and internal staff alike to connect, learn and enjoy unique experiences one can only get in Champaign, Illinois, every October. I'm happy to provide some highlights from the week and invite you to save the date to join us next year: October 6–9, 2020.

We began this week with pre-conference training on topics from machine learning and neural networks to application building and “Computational X,” offering headquarters tours and an opening reception before the “real” conference even began. Monday's [opening keynote](#) by CEO Stephen Wolfram covered a ton of ground, from a Version 12 recap to a roadmap of things to come. True to tradition, Stephen uncovered bugs in pre-release versions of our software, livecoded examples and gave the audience so much to look forward to.



<https://blog.wolfram.com/2019/11/01/wolfram-technology-conference-2019-its-a-wrap/>

Wolfram Innovator Award Winners Each year at the Wolfram Technology Conference, Stephen recognizes a number of outstanding individuals whose work with the [Wolfram Language](#) has been exemplary. Congratulations to the 11 winners of the 2019 [Wolfram Innovator Award](#):



- **Thomas Burghardt, PhD**, Mayo Clinic Rochester: for the application of neural networks constructed with machine intelligence tools in the study of inheritable heart disease.
- **Todd Feitelson**, Millbrook School: for innovative educational techniques utilizing computational thinking and 3D printing in high-school classrooms.
- **Chris Hanusa, PhD**, CUNY Queens College: for creating tools to advance the visualization of concepts in the classroom through computational technology.
- **Joo-Haeng Lee, PhD**, Electronics and Telecommunications Research Institute: for developing a unique and powerful pixel-based color transition algorithm (PixelSwap) and his work in synthetic learning sets.
- **Casey Mulligan, PhD**, University of Chicago, Former Chief Economist for the White House Council of Economic Advisers: for his innovative work on automated economic reasoning, which can begin with purely qualitative assumptions.

- **Flip Phillips, PhD**, Skidmore College: for his work on the visual and haptic perception of two- and three-dimensional shapes, psychological aesthetics and cortical plasticity related to blindness and visual restoration.
- **Robert Rasmussen, PhD, and William “Kirk” Reinholtz**, NASA Jet Propulsion Laboratory: for optimizing the integration of mission operation systems and preserving consistent and accountable information throughout the operations processes.
- **Jane Shen-Gunther, MD, Colonel**, US Army, Brooke Army Medical Center: for automating data processing for DNA sequencing in gynecological oncology and HPV detection and integrating interactive visualizations into reporting structures.
- **Yehuda Ben-Shimol, PhD**, Ben-Gurion University of the Negev: for introducing thousands of students and fellow faculty to the use of computational thinking in communications systems engineering as well as contributions to the advancement of earthquake prediction.
- **Mihai Vidrighin, PhD**, PsiQuantum: for building comprehensive models of nonlinear and quantum optics to describe spontaneous parametric photon-pair generation and quantum optics circuits.