

Eric Roy Fossum

Because of your work, we can record the important events of our lives on our digital cameras and smartphones, including the occasion of this Commencement. As one of the world's leading experts in solid-state image sensors, you are best known for the invention of the CMOS image sensor, a "camera-on-a-chip" used in almost all cell-phone cameras, Web cams, many digital cameras, and medical imaging.

As a professor with the Thayer School of Engineering at Dartmouth College, where you have been since 2010, you are teaching and researching the next generation of solid-state image sensors for gigapixel cameras and for 3D image capture. You also coordinate the Thayer School's Ph.D. Innovation Program—the first of its kind, which addresses the nation's need for engineers with both technical and entrepreneurial expertise.

Born and raised in Connecticut, you came to Trinity College as a member of the Class of 1979 and quickly distinguished yourself as an exceptional scholar. A physics and engineering major, you were a President's Fellow in Physics and received the Senior Physics Prize. You also put your technology skills to good use at Trinity as a part-time systems analyst and programmer in the Admissions and Financial Aid departments. After earning your M.S. and Ph.D. in engineering and applied science from Yale University, you joined the electrical engineering faculty at Columbia University.

In 1990, you became part of NASA's Jet Propulsion Laboratory at the California Institute of Technology. It was there that you developed the camera-on-a-chip technology when asked to miniaturize the cameras that go on spacecraft. Seeing that this technology had commercial applications, you co-founded Photobit Corporation in 1995 to bring your invention to the public sector. You served in several top management roles within the company, including CEO.

From 2005 to 2007, you were chairman and CEO of Siimpel Corporation, developing MEMS-based camera modules with auto-focus and shutter functions for cell phones. From 2008 to 2013, you consulted with Samsung Electronics on 3D image sensors and strategic issues.

Your body of work is most impressive, including more than 260 technical papers and 150 U.S. patents. You are also co-founder, treasurer, and past president of the International Image Sensor Society, a Fellow member of the Institute of Electrical and Electronic Engineers, a senior member of the Optical Society of America, and a member of the Society of Motion Picture and Television Engineers. You also serve on the Board of Directors of the National Academy of Inventors.

In 2011, you were inducted into the National Inventors Hall of Fame. In 2012, you were selected as a Charter Fellow of the National Academy of Inventors, and in 2013, you were elected to the National Academy of Engineering. Later this year, you will receive the Wilbur Cross Medal of the Yale Graduate School Alumni Association. Other honors include the National Science Foundation Presidential Young Investigator Award, the NASA Exceptional Achievement Medal, and the Photographic Society of America's Progress Medal for Outstanding Contribution to Photography.

You also have given back to Trinity. You have served as a member of the Board of Fellows and the Trinity Engineering Advisory Committee and recently joined the Science, Technology, Engineering, and Mathematics Advisory Board.

In light of your extensive contributions to technology and your informed leadership of tomorrow's brightest inventors and entrepreneurs, I have the honor of presenting you, Eric Roy Fossum, for the degree of Doctor of Science, *honoris causa*.

James F. Jones, Jr.
President and Trinity College
Professor in the Humanities

Paul E. Raether '68
Chairman
Trinity College Board of Trustees

May 18, 2014