

# The 2017 VGTC Virtual Reality Technical Achievement Award



## Michael Zyda

The 2017 Virtual Reality Technical Achievement Award goes to Michael Zyda, University of Southern California Department of Computer Science, for fundamental work in virtual reality networking, body tracking & institutionalizing the application of virtual reality. The IEEE VGTC is pleased to award Michael Zyda the 2017 Virtual Reality Technical Achievement Award.

Michael Zyda is the Founding Director of the USC GamePipe Laboratory, and a Professor of Engineering Practice in the USC Department of Computer Science. At USC, he founded the B.S. in Computer Science (Games), the M.S. in Computer Science (Game Development), and the USC Games joint Advanced Games course and took that program from no program to the #1 Games program in the world. That program has been rated #1 by the Princeton Review for six straight years. His alums have shipped games played by over 2.5 billion players, about \$100B in revenue.

From Fall 2000 to Fall 2004, he was the Founding Director of the MOVES (modeling, virtual environments, and simulation) Institute located at the Naval Postgraduate School, Monterey, and a Professor in the Department of Computer Science at NPS as well. At NPS, Zyda's NPSNET Research Group built the first networked virtual environment with fully instrumented body suits that played across the Internet. His work on the networking of virtual environments contributed to the development of the IEEE 1278.1 standard for distributed interactive simulation. He helped found the subspecialty in modeling and simulation for the United States Navy, the simulation operations functional area (57) for the US Army and the simulation operations area (MOS-9625) for the US Marine Corps. While at NPS, Zyda was Associate Editor and then Senior Editor for the MIT Press Journal Presence: Teleoperators and Virtual Environments from 1993 - 2004. With Fred Brooks and Henry Fuchs, he co-founded the ACM SIGGRAPH Symposium on Interactive 3D Graphics in 1990.

He was a member of the National Research Council Committee that put out the report "Virtual Reality - Scientific and Technological Challenges". He chaired the NRC Committee that put out the study "Modeling and Simulation - Linking Entertainment and Defense". That NRC report changed the entire Department of Defense towards the usage of games and entertainment technology for its future modeling and simulation systems. From that report, Zyda wrote the operating plan and research agenda that founded USC's Institute for Creative Technologies.

For the National Research Council, he has served on committees for the Behavioral and Social Sciences and Education Commission, the Computer Science and Telecommunications Board, the Aeronautics and Space Engineering Board, the Mathematical Sciences and Their



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Applications Board, the Naval Studies Board, the Air Force Studies Board, the Army Research Laboratory Technical Assessment Board, the Board on Higher Education and Workforce, the Board on Behavioral, Cognitive, and Sensory Sciences, and the Board on Earth Sciences and Resources.

Zyda holds a lifetime appointment as a National Associate of the National Academies, an appointment made by the Council of the National Academy of Sciences in November 2003, awarded in recognition of "extraordinary service" to the National Academies.

Zyda is a member of the Academy of Interactive Arts & Sciences. He served as the principal investigator and development director of the America's Army PC game funded by the Assistant Secretary of the Army for Manpower and Reserve Affairs. He took America's Army from conception to three million plus registered players and hence, transformed Army recruiting. The creation of the America's Army game founded the serious games field. He co-holds two patents that form the basis for the nine-axis sensor in the Nintendo Wii U. He is known as the "Indiana Jones of virtual reality" and the "Raymond Chandler of technical computer science."

## AWARD INFORMATION

The IEEE VGTC Virtual Reality Technical Achievement Award was established in 2005. It is given every year to recognize an individual for a seminal technical achievement in virtual and augmented reality. VGTC members may nominate individuals for the Virtual Reality Technical Achievement Award by contacting the awards chair, Arie Kaufman, at [vgtc-vr-awards@vgtc.org](mailto:vgtc-vr-awards@vgtc.org).