langlois@cs.cornell.edu
http://www.cs.cornell.edu/~langlois

Cornell University 345 Gates Hall Ithaca, NY 14853

TIMOTHY R. LANGLOIS

education

Ph.D. Candidate, Computer Science, Cornell University, 2011–Present. Advised by Doug James

Relevant courses: Computational Fluid Dynamics, Computational Motion, Dynamical Systems, Sparse Matrix Computations, Realistic Image Synthesis, Partial Differential Equations

 $B.S., Computer\ Systems\ Engineering,\ University\ of\ Massachusetts\ Amherst,\ 2009.$

Summa Cum Laude

Double major in Computer Science

research interests Physical Simulation Computational Acoustics Scientific Computing

publications

Conference and Journal articles

Timothy R. Langlois, Steven S. An, Kelvin K. Jin, and Doug L. James. "Eigenmode Compression for Modal Sound Models." *ACM Transactions on Graphics (SIGGRAPH 2014)*. 33(4), August, 2014.

Timothy R. Langlois and Doug L. James. "Inverse-Foley Animation: Synchronizing rigid-body motions to sound." *ACM Transactions on Graphics (SIGGRAPH 2014)*. 33(4), August, 2014.

Timothy R. Langlois, Ramgopal R. Mettu, and Richard W. Vachet. "Protein Identification Using Receptor Arrays and Mass Spectrometry." *Advances in Computational Biology*, Springer Advances in Experimental Medicine and Biology Series. 680, 343-351, 2010.

Patents

Srinivas Ravela, William J. Dupree, Timothy R. Langlois, Marilyn M. Wolfson, and Christopher M. Yang. "Method and apparatus for generating a forecast weather image." U.S. Patent No. 8,625,840. 7 Jan. 2014.

experience

Software Engineer, MIT Lincoln Laboratory, 2009–2011.

Developed distributed, real-time weather prediction algorithms.

Software Engineering Intern, Raytheon, 2008 (summer).

Software Engineering Intern, DEKA Research and Development, 2006–2008 (summers and winters).

Developed software for embedded systems on various medical devices.

teaching

Introduction to Computer Graphics (CS4620), Cornell University, 2013.

grants & awards

2012. Recipient, National Science Foundation, Graduate Research Fellowship.

service

Reviewer, ACM SIGGRAPH 2014.

Cornell Computer Science Student Brown Bag Czar, 2013-Present.

Organized weekly presentations on current research by graduate students.

Volunteer, Expand Your Horizons, 2012.

Co-organized an educational workshop for middle-school students.