Jarek Rossignac is Professor of Computing at Georgia Tech. His research focuses on the design, representation, simplification, compression, analysis and visualization of complex 3D shapes and animations. Before joining Georgia Tech in 1996 as the Director of the GVU Center, he was the Visualization Strategist and Senior Manager at IBM Research. He holds a Ph.D. in E.E. from the University of Rochester, a Diplôme d'Ingénieur ENSEM, and a Maîtrise in M.E. from the University of Nancy, France. He holds 26 patents and published 154 peer-reviewed articles (including 4 in ACM SIGGRAPH, 6 in the ACM Transactions on Graphics, and 13 in the ACM Symposium on Solid and Physical Modeling) for which he received 23 Awards and over 7900 citations, yielding an h-index of 48. He created the ACM Symposia on Solid Modeling, chaired 20 conferences and 6 international program committees (including Eurographics), delivered over 30 Distinguished or Invited Lectures and Keynotes, organized and delivered numerous short courses (including 8 at SIGGRAPH) and served on the editorial boards of 7 professional journals and on 82 Technical Program committees (including SIGGRAPH and several other ACM conferences). He served as the Editor-in-Chief of the GMOD (Graphical Models) journal 2010-13. Currently he is the Director of the NSF Aquatic Propulsion Lab (APL). He is a Senior Member of the ACM and a Fellow of the Eurographics association.

His technical contributions include:

- Pioneering representations of non-regularized complexes in arbitrary dimension: His 1989 paper on Selective Geometric Complexes has 256 citations and has influenced several academic and commercial modelers (including CATIA).

- Pioneering simplification of polygonal meshes: His 1993 paper on mesh simplification has 888 citations and inspired several commercial products, including SGIs OpenGL Accelerator.

- Pioneering geometry compression: His 1998 ACM ToG paper on Topological Surgery has 757 citations and provided the basis for the MPEG-4 standard on 3D compression. His 1999 IEEE TVCG paper on EdgeBreaker has 637 citations. He published 23 reviewed articles and several book chapters on geometry compression and received several prestigious awards for this work.

- He pioneered 3D interaction paradigms: His 2003 ACM SIGGRAPH paper on Twister has 111 citations and has provided an intuitive tools for deforming 3D models and has inspired medical applications.

- He led recent developments on compact representations of triangle meshes: His 2009 ACM SPM paper on SOT reduced the cost of storing the connectivity of triangle meshes to 3 references per triangle (rpt). His 2011 Eurographics paper on SQuad pushed it down to 2 rpt. His 2013 IEEE TVCG paper on Grouper made SQuad streamable. His 2011 SIGGRAPH paper on LR reached 1 rpt. His 2012 ACM SPM paper on Zipper achieved 6 bits per triangle.

- He contributed advances to solid modeling and graphics approaches based on Constructive Solid Geometry (CSG): His 1984 paper on Constant-Radius Blending has 167 citations and has provided a solution to the long standing problem of incorporating blending operations in CSG. His 1989 ACM ToG paper on Active Zones in CSG has 74 citations and has provided mathematical conditions for identifying where the boundary of a primitive is important. 2005 ACM SIGGRAPH paper on Blister, which has 52 citations, and his 2007 IEEE TVCG paper on CST made further advances on the realtime GPU rendering of CSG models.

- He has pioneered the development of fundamental tools for designing and analyzing rigid and affine motions: His 2011 ACM TOG paper on Steady Affine Motions established steady motions as the fundamental animation tool.