Reza Taghavi

ITASCA

Software Marketing, CAD/CAE, CFD, Grid Generation

Expertise

Software Marketing, Computer-Aided Engineering, Design-Analysis Integration, Computational Geometry and Grid Generation, Computational Fluid Mechanics

Education

Ph.D. (Fluid Mechanics), 1985
University of Minnesota, Minneapolis

Diplôme d'Ingénieur Civil, 1980
Ecole Nationale des Ponts et Chaussées, Paris, France

Professional Affiliations

Member: American Institute of Aeronautics and Astronautics, Society of Automotive Engineers, American Society of Mechanical Engineers

Patents

R. Taghavi, S. Behling and Y. Mochizuki. 1995. U.S. Patent US5453934: Method for Use in Designing an Arbitrarily Shaped Object, Assigned to Cray Research, Inc. Applied for 3/26/1993, granted 9/26/1995.

Professional Experience

2004 - Present	*Itasca Consulting Group, Inc., Minneapolis, Minnesota, Consultant*
1995 – Present	*Simulation Works, Inc., Saint Paul, Minnesota, Technical Director*
1990 - 1995	*Cray Research, Inc., Marketing Department, Eagan, Minnesota, USA, Engineering Application Development Manager*
1985 - 1990	*Renault Automobiles Engineering Center, Rueil-Malmaison, France Fluid and Thermal Analysis Group Leader*
1980 - 1985	*University of Minnesota, Saint Anthony Falls Hydraulic Laboratory, Minneapolis, Graduate Research Assistant*

Project Experience

Software Marketing and Process Implementation: Propose and implement measurable software support, tracking, requirement gathering processes. Planning for launch of new software product to the mining and civil engineering industries.

Business Development: Founded Simulation Works. Assembled a team of developers and led the design and development of KUBRIX®, an automatic all-hexahedral grid-generation software package based on fuzzy-logic block decomposition. Established reseller network in the US, Europe and the Pacific, led launch and promotion.

Software Development: At Cray Research, led the design, development and launch of niche technical supercomputing software in the areas of parallel automatic grid generation from imperfect CAD geometry (HEXAR) and aerodynamic, fuel spray and combustion simulations in diesel and stratified charge gasoline engines (Turbo-KIVA).

Internal Promotion: At Renault Automobiles, led the evaluation and promotion of the first commercial fluid and thermal analysis simulation packages throughout operational departments. Represented Renault in the European Automotive Joint Research Consortium along with BMW, Fiat, The Rover Group, Peugeot, S.A. and Volkswagen-Audi, GmbH.

Organizer: In 1990, while at Cray Research, founded the International Multidimensional Engine Modeling Meeting, an annual forum of close to 150 researchers and engineers from industry, national laboratories and academia working on the computer modeling of combustion. This is now a full-fledged annual conference run in association with the annual Society of Automotive Engineers (SAE) meeting. Its 14th annual meeting was held last March in Detroit. In 1991, while at Cray Research, co-founded the International Meshing Roundtable, an annual forum of over 150 researchers from industry, national laboratories and academia working on automatic mesh generation for Computer-Aided Engineering. Its 12th annual meeting was held last October in Santa Fe, New Mexico. Currently, member of the organizing committee.