



**Dr. Shahriar Setoodeh**

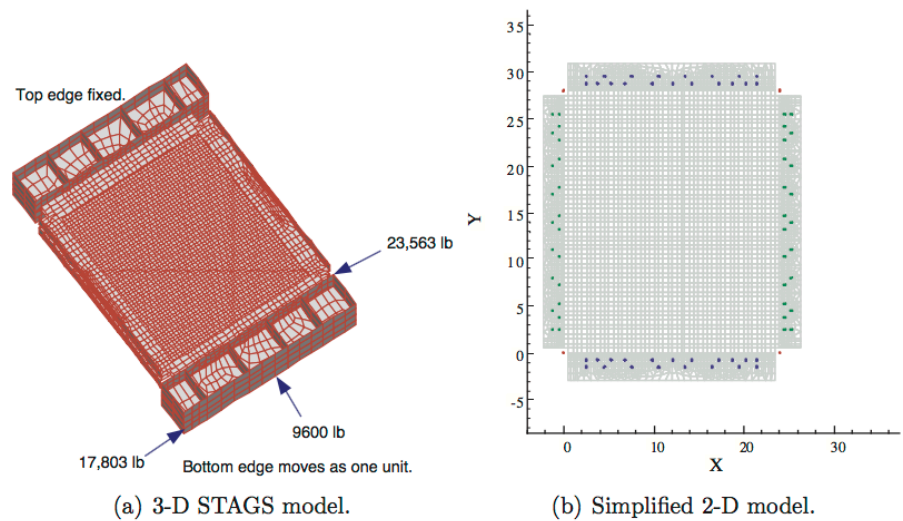


Figure 4.10: Picture frame panel for combined compression and shear loading.

From: Shahriar Setoodeh, “Optimal design of variable-stiffness fiber-reinforced composites using cellular automata”, PhD Dissertation, Virginia Polytechnic Institute and State University, September 2005

See:

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Northrop Grumman Innovation Systems, Goleta, California (2018 – present)

Previously:

Orbital Sciences Corporation (Orbital ATK: Now part of Northrop Grumman) (2008-2018)

Hytec, Inc. (2006-2008)

Aerospace Engineering, Technical University Delft (postdoc: 2005-2006)

### Education:

2001-2005 PhD Virginia Polytechnic Institute and State University; PE Virginia 2018

1996-1998 M.S. Shiraz University

1991-1994 B.Sc Shiraz University

### Selected Publications:

S. Setoodeh and Z. Gürdal. Design of composite layers with curvilinear fiber paths using cellular automata. In Proceedings of the 44th AIAA/ASME/ASCE/AHS Structures, Structural Dynamics, and Materials Conference, Norfolk, Virginia, 7-10 April 2003.

S. Setoodeh, M. M. Abdalla, and Z. Gürdal. Simultaneous topology and curvilinear fiber path design of composite layers using cellular automata. In 45th AIAA/ASME/ASCE/AHS/ASC SDM Conference, Palm Spring, California, April 18-22 2004.

S. Setoodeh, Z. Gürdal, and L. T. Watson. Design of variable-stiffness composite layers using cellular automata. Computer Methods in Applied Mechanics and Engineering, Available Online June 2005.

Shahriar Setoodeh, “Optimal design of variable-stiffness fiber-reinforced composites using cellular automata”, PhD Dissertation, Virginia Polytechnic Institute and State University, September 2005

Setoodeh, S., Blom, A. W., Abdalla, M. M., and Gürdal, Z., "Generating Curvilinear Fiber Paths from Lamination Parameters Distribution," 47th AIAA/ASME/ASCE Structures, Structural Dynamics & Materials Conference, Vol. 5, AIAA, Reston, VA, May 2006, pp. 3440–3452.

Setoodeh, S., Abdalla, M. M., and Gürdal, Z., "Approximate Feasible Regions for Lamination Parameters," 11th AIAA/ISSMO Multidisciplinary Analysis and Optimization Conference, Vol. 2, AIAA, Reston, VA, May 2006, pp. 814–822.

S. Setoodeh, M. M. Abdalla, and Z. Gürdal, "Design of variable–stiffness laminates using lamination parameters," *Composites Part B: Engineering*, vol. 37, no. 4–5, pp. 301–309, Jun. 2006.

M.M. Abdalla, S. Setoodeh, Z. Gürdal, "Design of variable stiffness composite panels for maximum fundamental frequency using lamination parameters", *Compos Struct*, 81 (2007), pp. 283-291

Adriana W. Blom, Shahriar Setoodeh, Jan M.A.M. Hol and Zafer Gürdal, "Design of variable-stiffness conical shells for maximum fundamental eigenfrequency", *Computers & Structures*, Vol. 86, No. 9, May 2008, pp. 870-878, Special Issue: Composites, doi:10.1016/j.compstruc.2007.04.020

Shahriar Setoodeh, Mostafa M. Abdalla, Samuel T. IJsselmuiden and Zafer Gürdal, "Design of variable-stiffness composite panels for maximum buckling load", *Composite Structures*, Vol. 87, No. 1, January 2009, pp. 109-117