

**Graeme J. Kennedy (co-PI)**

Assistant Professor

School of Aerospace Engineering, Georgia Institute of Technology

270 Ferst Drive

Atlanta, GA, 30318

Phone: 404-894-9811, [graeme.kennedy@ae.gatech.edu](mailto:graeme.kennedy@ae.gatech.edu)

**PROFESSIONAL CREDENTIALS**

University of Toronto, Aerospace Engineering, B.A.Sc., 2005

University of Toronto Institute for Aerospace Studies, M.A.Sc., 2007

University of Toronto Institute for Aerospace Studies, Ph.D., 2012

**ACADEMIC / PROFESSIONAL APPOINTMENTS**

2013–present, Assistant Professor, Georgia Institute of Technology

2012–2013, Postdoctoral Fellow, University of Michigan

**AWARDS**

2012 Green Aviation Research and Development Network (GARDN) Student Award

2007-2010 NSERC Canadian Graduate Scholarship Doctoral Level

2006-2007 NSERC Canadian Graduate Scholarship Masters Level

2005-2006 Ontario Graduate Scholarship

2004 NSERC Undergraduate Research Student Award

2001-2002 Walter F. Scott Memorial Entrance Scholarship

**SELECTED PUBLICATIONS**

- [1] Graeme J. Kennedy and Joaquim R.R.A. Martins. A parallel finite-element framework for large-scale gradient-based design optimization of high-performance structures. *Finite Elements in Analysis and Design*, 87(0):56 – 73, 2014.
- [2] Graeme J. Kennedy and Joaquim R. R. A. Martins. A parallel aerostructural optimization framework for aircraft design studies. *Structural and Multidisciplinary Optimization*, 2014. Accepted.
- [3] Graeme J. Kennedy, Gaetan K. W. Kenway, and Joaquim R. R. A. Martins. Towards gradient-based design optimization of flexible transport aircraft with flutter constraints. In *Aviation 2014*, Atlanta, Georgia, 2014.
- [4] Kai A. James, Graeme J. Kennedy, and Joaquim R.R.A. Martins. Concurrent aerostructural topology optimization of a wing box. *Computers & Structures*, 134(0):1 – 17, 2014.
- [5] Gaetan K. W. Kenway, Graeme J. Kennedy, and Joaquim R. R. A. Martins. Scalable parallel approach for high-fidelity steady-state aeroelastic analysis and adjoint derivative computations. *AIAA Journal*, 52:935–951, 2014.
- [6] Graeme J. Kennedy and Joaquim R. R. A. Martins. An adjoint-based derivative evaluation method for time-dependent aeroelastic optimization of flexible aircraft. In *Proceedings of the 54th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference*, Boston, MA, April 2013.

- [7] Graeme J. Kennedy and Joaquim R. R. A. Martins. A laminate parametrization technique for discrete ply-angle problems with manufacturing constraints. *Structural and Multidisciplinary Optimization*, pages 1–15, 2013.
- [8] Graeme J. Kennedy and Joaquim R. R. A. Martins. A homogenization-based theory for anisotropic beams with accurate through-section stress and strain prediction. *International Journal of Solids and Structures*, 49(1):54 – 72, 2012.
- [9] Graeme J. Kennedy, Jorn S. Hansen, and Joaquim R. R. A. Martins. A Timoshenko beam theory with pressure corrections for layered orthotropic beams. *International Journal of Solids and Structures*, 48(16-17):2373 – 2382, 2011.
- [10] Graeme J. Kennedy and Jorn S. Hansen. The hybrid-adjoint method: A semi-analytic gradient evaluation technique applied to composite cure cycle optimization. *Optimization and Engineering*, 11:23–43, 2010.