Chang-kwon Kang

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BIO:

Dr. Chang-kwon Kang received his bachelor's and master's degree in Aerospace Engineering from the Delft University of Technology in the Netherlands and PhD in Aerospace Engineering from the University of Michigan, where he stayed as a Postdoctoral Research Fellow until 2013. He joined the Department of Mechanical and Aerospace Engineering at the University of Alabama in Huntsville in 2013 as an Assistant Professor. He has coauthored numerous journal and conference papers on flapping wing aerodynamics and the Cambridge University Press book "An Introduction to Flapping Wing Aerodynamics". His interests are in flapping wing unsteady aerodynamics, Micro-Air Vehicles, locomotion of biological and robotic flyers/swimmers, modeling of complex, multi-disciplinary physical systems, and high performance computing.

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RELEVANT PUBLICATIONS:

1. Shyy, W., Aono, H., Kang, C. and Liu, H. *An Introduction To Flapping Wing Aerodynamics*, Cambridge University Press, 2013
2. Vandenheede, R., Bernal, L. P. B., Morrison, C., Gogulapati, A., Friedmann, P. P., Kang, C., and Shyy, W., "Comparison of Experiments on Bio-inspired Hover Kinematics with the Unsteady Vortex Model and CFD," AIAA Journal, accepted for publication
3. Kang, C. and Shyy, W., Scaling and Lift Generation of Hovering Flexible Wing of Insect Size," Journal of Royal Society Interface, Vol. 10, Nr. 85, 2013
4. Kang, C., Aono, H., Baik, Y.S., Bernal, L.P., and Shyy, W., "Fluid Dynamics of Pitching and Plunging Flat Plate at Reynolds Number of $O(10^4)$," AIAA Journal, Vol. 51, No. 2, pp. 315-329, 2013
5. Kang, C., Aono, H., Cesnik, C.E.S., and Shyy, W., "Effects of Flexibility on the Aerodynamic Performance of Flapping Wings," Journal of Fluid Mechanics, Vol. 689, pp. 32 - 74, 2011; also AIAA-2011-3121
6. Trizila, P., Kang, C., Aono, H., Visbal, M., and Shyy, W., "Low-Reynolds-Number Aerodynamics of a Flapping Rigid Flat Plate," AIAA Journal, Vol. 49, No. 4, pp. 806 - 823, 2011
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8. Ol, M., Bernal, L., Kang, C., and Shyy, W., "Shallow and Deep Dynamic Stall for Flapping Low Reynolds Number Airfoils", Experiments in Fluids, Vol. 46, Nr. 5, pp. 883-901, 2009
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