

A Postdoctoral Position is available in the [Erik Jonsson School of Engineering and Computer Science](#) at the University of Texas at Dallas. The successful candidate will work on advanced control systems for improving the reliability of next generation large-scale offshore wind turbines. This project will build upon the work of Lackner and Rotea (2011a), which has demonstrated that structural control systems have the potential to significantly improve the structural response and reliability of offshore systems. The goal of the project is to develop advanced algorithms for structural control with constraints, integrate algorithms with other turbine controls, and demonstrate solutions in computer simulations using FAST-SC (Lackner and Rotea, 2011b). There is an option of building a laboratory scale experimental test-bed.

The Erik Jonsson School is experiencing very rapid growth as part of a \$200 million program with funding from public and private sources. As a result, the school is expanding its existing programs, establishing new programs, and recruiting outstanding faculty.

The University of Texas at Dallas is situated in Richardson, one of the most attractive suburbs of the Dallas metropolitan area with several hundred high-tech companies within a few miles of the campus. Opportunities for industry/university interactions are outstanding.

The successful candidate will have a strong background in robust control of systems with constraints and demonstrated proficiency with Matlab/Simulink. Experience with modeling and control of resonant systems is preferred. For additional information, contact Dr. Mario A. Rotea, rotea@utdallas.edu.

Review of applicants will begin immediately and will continue until August 5, 2011.

The University of Texas at Dallas is an Equal Opportunity / Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, age, citizenship status, Vietnam era or special disabled veteran's status, or sexual orientation.

To apply for this position, applicants should submit (a) cover letter, (b) curriculum vitae, (c) a single relevant publication, and (d) the names and contact information for at least three professional references via email to Dr. Mario A. Rotea at rotea@utdallas.edu. Application materials should be sent as a single PDF file.

References:

Lackner MA, Rotea MA (2011a), Structural control of floating wind turbines, *MECHATRONICS*, Volume: 21, Issue: 4, Special Issue on Past, present and future modeling and control of wind turbines, pp. 704-719.

Lackner MA, Rotea MA (2011b), Passive structural control of offshore wind turbines, *WIND ENERGY*, Volume: 14, Issue: 3, pp. 373-388.