

Animesh Chakravarthy

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Educational Background

Ph.D in the field of Estimation & Control, Aeronautics & Astronautics Dept., Massachusetts Institute of Technology (MIT) - February 2007. (Thesis title : Safety of a multi-vehicle system in mixed communication environments)

Master's Degree in Aerospace Engineering, Indian Institute of Science (I.I.Sc.) - 1994

Bachelor's Degree in Mechanical Engineering, Bangalore University, India - 1990

Work Experience

Assistant Research Scientist at the University of Florida, 2007-date.

Graduate Research Assistant, Aero-Astro Dept., MIT, 2001-2006.

Research Scientist/Engineer in Flight Control Systems, Aeronautical Development Agency (ADA), India, July 1994 – August 2001.

Project Associate at the Joint Advanced Technology Program (JATP), Indian Institute of Science (I.I.Sc), March 1994 – July 1994.

Project Assistant at the Dept. of Aerospace Engineering, Indian Institute of Science (I.I.Sc), November 1990 – July 1992.

Current Research Interests

Collision Detection/Obstacle Avoidance in Dynamic Environments

Control of Time-varying Systems

Path Planning in Dynamic Environments

Dynamics of Insect Flight

Multi-vehicle Systems

Journal Publications

1) Animesh Chakravarthy, D. Ghose, "Capturability of Realistic Generalized True Proportional Navigation", IEEE Transactions on Aerospace and Electronic Systems, Jan. 1996, pp. 407-418.

2) A. Chakravarthy, D. Ghose, "Obstacle Avoidance in a Dynamic Environment : A

Collision Cone Approach", IEEE Transactions on Systems, Man, and Cybernetics, Sept. 1998, pp. 562-574.

3) A. Chakravarthy, G. Deodhare, V. Patel and A. Saraf, "Design of Notch Filters for Structural Responses with Multi-Axis Coupling", Journal of Guidance, Control and Dynamics, March 1999, pp. 349-357.

4) A. Chakravarthy, K.Y. Song, and E. Feron, "Preventing automotive pile-up crashes in mixed communication environments", submitted to the IEEE Journal of Intelligent Transportation Systems, under review.

Conference Publications

1) Animesh Chakravarthy, KyungYeol Song and E. Feron, "A GPS-based slowdown warning system for automotive safety", Proc. of the IEEE Intelligent Vehicles Symposium, Parma, June 14-17, 2004.

2) A. Chakravarthy, K.Y. Song, and E. Feron, "A slowdown warning system for automobiles", Proc. of the IEEE Systems Man and Cybernetics Conference, October 10-13, 2004, The Hague, Netherlands.

3) A. Chakravarthy, K.Y. Song, and E. Feron, "Influence of a slowdown warning system on a multi-vehicle stream", Proc. of the American Control Conference, June 2005, Portland.

4) A. Chakravarthy, J. Peraire and E. Feron, "Effects of a slowdown warning system in mixed communication environments : A macroscopic study", Proc. Of the European Control Conference, July 2007, Greece.

5) A. Chakravarthy, G. Deodhare, V. Patel and A. Saraf, "A Systematic Method to Design Notch Filters for Structural Responses with Multi-Axis Coupling", Proc. of AIAA Conference on Guidance and Control, August 8-11, 1997.