

# Nithin Govindarajan

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PERSONAL  
INFORMATION

Gender: Male  
Date of birth: December 11th, 1987  
Place of birth: Hyderabad, India  
Marital status: Single

RESEARCH  
INTERESTS

Dynamical systems, control theory, operator theory, matrix analysis, reachable set computation, system identification.

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## EDUCATION

**University of California of Santa Barbara**, Santa Barbara, United States

*Doctor of Philosophy, Mechanical Engineering* **Sept 2014 - present**

- Advisor: Prof. I. Mezic, Prof. S. Chandrasekaran

**Technische Universiteit Delft**, Delft, The Netherlands

*Master of Science, Aerospace Engineering (Cum Laude)* **Sept 2009 - Oct 2012**

- Advisor: Assoc. Prof. C. C. de Visser.

*Bachelor of Science, Aerospace Engineering (Cum Laude)* **Sept 2006 - July 2009**

## PUBLICATIONS

N. Govindarajan, H. Arbabi, L. van Blargian, T. Matchen, E. Tegling, and I. Mezic ***An operator-theoretic viewpoint to non-smooth dynamical systems: Koopman analysis of a hybrid pendulum.*** Submitted to CDC 2015.

N. Govindarajan, C.C. de Visser, K. Krishnakumar, J. Barlow, E. van Kampen, V. Stepanyan ***An optimal control framework for estimating autopilot safety margins*** (2014). *Journal of Guidance, Control, and Dynamics*, 1-11.

N. Govindarajan, C.C. de Visser, K. Krishnakumar ***A sparse collocation method for solving time-dependent HJB equations using multivariate B-splines*** (2014). *Automatica* 50 (9), 2234-2244.

N. Govindarajan ***An Optimal Control Approach for Estimating Aircraft Command Margins.*** MSc Thesis, Delft University of Technology, 2012.

## RECOGNITIONS AND AWARDS

**ME department UCSB**, Santa Barbara, United States

**Department Merit Fellowship.** **March 2014**

**Nuffic**, The Hague, The Netherlands

**Huygens Scholarship Programme.** **May 2011**

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## PROFESSIONAL EXPERIENCE

**National Aerospace Laboratory (NLR)**, Amsterdam, The Netherlands

*Junior R&D engineer - Cockpit & Flight Operations (ATCF)* **Nov 2012 - May 2013**

**Mission Critical Technologies (MCT) Inc.**, El Segundo, CA, United States

*Intern/junior researcher*

**Sept 2011 - May 2012**

- On site at NASA Ames *Adaptive Control and Evolvable Systems* (ACES) group.

TEACHING

**ME department UCSB**, Santa Barbabara, The Netherlands

Teaching assistant *ME14: Statics*

**Fall 2014**

Teaching assistant *ME163: Vibrations*

**Winter 2015**

Teaching assistant *ME16: Dynamics*

**Spring 2015**

**Studentplus**, Delft, The Netherlands

*Maths tutor*

**Feb 2007 - May 2008**

- Personal tutoring for high school students on the subject of mathematics.
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SOFTWARE  
SKILLS

Simulation and Programming: MATLAB & SIMULINK, MAPLE, MATHEMATICA, C/C++,  
Java  
CAD: Dassault Systèmes CATIA V5  
Computer Applications: Microsoft Windows family, T<sub>E</sub>X (L<sup>A</sup>T<sub>E</sub>X).

LANGUAGES

*English and Dutch* – fluent.

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HOBBIES AND  
INTERESTS

Wing-Chun Kung Fu, salsa dancing, fitness, travel.