

EDUCATION

- PhD Mechanical Engineering, Stanford University, September 2011–Present
 - ◊ Primary advisor: Stephen Boyd
 - ◊ Research interests: convex optimization, control systems
 - ◊ GPA: 4.04
- MS Electrical Engineering, Stanford, Sept. 2011–Dec. 2013
- BS Mechanical Engineering, UC Berkeley, Sept. 2006–Dec. 2010
 - ◊ GPA: 3.74

PUBLICATIONS

- N. Moehle, S. Boyd. *Value Function Approximation for Direct Control of Switched Power Converters*. Conf. Industrial Electronics and Applications, 2017.
- R. Takapoui, N. Moehle, S. Boyd. *A Simple, Effective Heuristic for Embedded Mixed-Integer Quadratic Programming* International Journal of Control, 2017.
- G. Banjac, B. Stellato, N. Moehle, P. Goulard, A. Bemporad, S. Boyd. *Embedded Code Generation Using the OSQP Solver*. Conf. on Decision and Control, 2017.
- N. Moehle, S. Boyd. *Maximum Torque-per-Current Control of Induction Motors via Semidefinite Programming*. Conf. on Decision and Control, 2016.
- N. Moehle, S. Boyd. *Optimal Current Waveforms for Switched-Reluctance Motors*. Multi-Conference on Systems and Control, 2016.
- R. Takapoui, N. Moehle, S. Boyd. *A Simple, Effective Heuristic for Embedded Mixed-Integer Quadratic Programming* American Control Conf., 2016.
- N. Moehle, S. Boyd. *A Perspective-Based Convex Relaxation for Switched-Affine Optimal Control*. Systems and Control Letters. 2015.
- N. Moehle, S. Boyd. *Optimal Current Waveforms for Brushless Permanent Magnet Motors*. Int. Journal of Control. 2015.
- N. Moehle, *Covariance Estimation in Two-Level Regression*, SysTol, 2013.

TEACHING

- Principal instructor:
 - ◊ Convex Optimization I (EE364A), Stanford, 2016
- Course assistant:
 - ◊ Stochastic Control Short Course, Chinese University of Hong Kong, Shenzhen, 2017
 - ◊ Convex Optimization II (EE364B), Stanford, 2014
 - ◊ Convex Optimization I (EE364A), Stanford, 2014
 - ◊ Introduction to Linear Dynamical Systems (EE263), Stanford, 2013
 - ◊ Introduction to Optimal Control Theory (AA203), Stanford, 2013
 - ◊ Feedback Control Design (ENGR105), Stanford, 2013

WORK EXPERIENCE

- Ph.D. software engineer intern, Google, 2014
 - ◊ Implemented control algorithms for renewable energy applications.
- Research intern, Robert Bosch LLC, 2011
 - ◊ Led a research initiative for high-efficiency heat-pumps.
- Plant modeling intern, Halotechnics, 2011
 - ◊ Wrote thermodynamic modeling software.

SOFTWARE

- `cvxpy-codegen`, a tool for deploying custom solvers for convex optimization.

SKILLS

- Software languages: Python, Julia, Matlab, C.
- Natural languages: English (native), Spanish (fluent)