

2005-2009 **PhD Student, Blekinge Institute of Technology**
Research related to simulation and parameter identification of nonlinear mechanical systems. Teaching courses in Solid mechanics, Finite Elements, Experimental mechanics and statics

Education

2011: **PhD in Mechanical Engineering, Blekinge Institute of Technology**
Thesis title, "Simulation and Experimental Methods for Characterization of Nonlinear Mechanical Systems"

2005 **MSc in Mechanical Engineering with emphasis on structural mechanics, Blekinge Institute of Technology**

2003 **BSc in Mechanical Engineering, Kalmar University**

Honors and Awards

2013 Innovation Prize at AB Sandvik Coromant, Optimization of differential pitch milling cutters

2017 Sandvik Coromant Top Achiever

Publications

Journal Papers:

Moris Devotta, A., Sivaprasad, P.V., Beno, T., Eynian, M., Hjertig, K., Magnevall, M., Lundblad, M.
A modified Johnson-Cook model for ferritic-pearlitic steel in dynamic strain ageing regime.
Metals, 9, 528, 2019.

Parsian, A., Magnevall, M., Eynian, M., & Beno, T.
Time domain simulation of chatter vibrations in indexable drills. The International Journal of Advanced Manufacturing Technology, 89(1-4), 1209-1221, 2017

Magnevall, M., Josefsson, A., Ahlin, K. and Broman, G.
Nonlinear Structural Identification by the "Reverse Path" Spectral Method, Journal of Sound and Vibration, vol. 331, no. 4, 938-946, 2012.

Magnevall, M., Lundblad, M., Ahlin, K. and Broman, G.
High Frequency Measurements of Cutting Forces in Milling by Inverse Filtering, Machining science and technology, vol. 16, no. 4, 487-500, 2012.

Josefsson A. Magnevall, M. Ahlin, K. and Broman, G.

Spatial location identification of structural nonlinearities from random data, Mechanical Systems and Signal Processing, vol. 27, 410–418, 2012.

Conference papers (peer-reviewed):

Östling, D. & Magnevall, M.,

Modelling the dynamics of a large damped boring bar in a lathe.

17th CIRP Conference on Modelling of Machining Operations, 2019.

Malakizadi, A., Oberbeck, J., Magnevall, M. & Krajnik, P.

A new constitutive model for cutting simulation of 316L austenitic stainless steel.

17th CIRP Conference on Modelling of Machining Operations, 2019.

Eynian, M., Magnevall, M., Cedergren, S., Wretland, A., & Lundblad, M.

New methods for in-process identification of modal parameters in milling. Procedia CIRP, 77, 469-472, 2018.

Parsian, A., Magnevall, M., Beno, T., & Eynian, M.

Sound Analysis in Drilling, Frequency and Time Domains. Procedia CIRP, 58, 411-415, 2017.

Östling, D., & Magnevall, M.

Modelling and characterization of nonlinearities in a tuned mass damper-impulse hammer versus shaker excitation. 27th International Conference on Noise and Vibration Engineering, Leuven, Belgium, 2016.

Magnevall, M., Beno, T.

Improved Cutting Force Measurements in Milling Using Inverse Filtering, IMAC-XXXIV Conference & Exposition on Structural Dynamics, Orlando, Florida, 2016

Parsian, A., Magnevall, M., Beno, T., Eynian, M.

Time-Domain Modeling of Torsional-Axial Chatter Vibrations in Indexable Drills with Low Damping, 4th International Conference on Virtual Machining Process Technology, Vancouver 2015

Parsian, A., Magnevall, M., Beno, T., Eynian, M.

A Mechanistic Approach to Model Cutting Forces in Drilling with Indexable Inserts

New Production Technologies in Aerospace Industry - 5th Machining Innovations Conference , 2014

Magnevall, M., Liljerehn, A., Lundblad, M. and Ahlin, K.

Improved Cutting Force Measurements in High Speed Milling Using Inverse Structural Filtering, 2nd PMI International Conference, Vancouver, Canada, 2010

Magnevall, M., Josefsson, A. and Ahlin, K.

On Parameter Estimation and Simulation of Zero Memory Nonlinear Systems, IMAC-XXVI Conference & Exposition on Structural Dynamics, Orlando, Florida, 2008

Josefsson, A., Magnevall, M. and Ahlin, K.

Estimating the Location of Structural Nonlinearities from Random Data, IMAC-XXVI Conference & Exposition on Structural Dynamics, Orlando, Florida, 2008

Josefsson, A., Magnevall, M. and Ahlin, K.

On Nonlinear Parameter Estimation with Random Noise Signals, IMAC-XXV Conference & Exposition on Structural Dynamics, Orlando, Florida, 2007

Magnevall, M., Josefsson, A. and Ahlin, K.

Parameter Estimation of Hysteresis Elements Using Harmonic Input, IMAC-XXV Conference & Exposition on Structural Dynamics, Orlando, Florida, 2007

Ahlin, K. Magnevall, M and Josefsson, A.

Simulation of Forced Response in Linear and Nonlinear Mechanical Systems Using Digital Filters, ISMA 2006, Leuven, Belgium, 2006

Magnevall, M., Josefsson, A. and Ahlin, K.

On Nonlinear Parameter Estimation, ISMA 2006, Leuven, Belgium, 2006

Josefsson, A., Magnevall, M. and Ahlin, K.

Control Algorithm for Sine Excitation on Nonlinear Systems, IMAC-XXIV Conference & Exposition on Structural Dynamics, St. Louis, Missouri, 2006

Magnevall, M., Josefsson, A. and Ahlin, K.

Experimental Verification of a Control Algorithm for Nonlinear Systems, IMAC-XXIV Conference & Exposition on Structural Dynamics, St. Louis, Missouri, 2006