

Nur Uddin, PhD

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Researchgate : https://www.researchgate.net/profile/Nur_Uddin (Score: 5.28)
Google Scholar : <https://scholar.google.com/citations?user=wBOWfZoAAAAJ> (H-index: 5)
Website : <http://www.upj.ac.id>



Dr. Uddin memiliki keahlian di bidang control system, artificial intelligence, automation, robotics, mechatronics, embedded system, aircraft system, dan turbomachinery.

Dr. Uddin, meraih gelar PhD di bidang Cybernetics dari Norwegian University of Science and Technology (NTNU) di Norwegia pada bulan April 2016. Selama menempuh S3, Dr. Uddin melakukan penelitian di bidang compressor control pada sistem transmisi gas alam menggunakan jalur pipa. Dr. Uddin bersama pembimbingnya, Prof. Jan Tommy Gravdahl, mendaftarkan inovasi yang dilakukan dalam penelitiannya ke European Patent dengan nomor EP2423515 A1 dengan judul Industrial Compressor System. Hasil dari penelitian tersebut telah dipresentasikan dan dipublikasikan dalam beberapa seminar internasional dan journal internasional. Selama menempuh S3, Dr. Uddin mendapat beasiswa dari Siemens Oil & Gas. Selama di Norwegia, Dr. Uddin sempat bekerja hamper satu tahun sebagai control system developer di Enhanced Drilling, Oslo, sebuah oil service company yang mengembangkan drilling automation system untuk pengeboran minyak di laut dalam.

Dr. Uddin menyelesaikan S1 dari Teknik Penerbangan ITB pada tahun 2002, dan kemudian bergabung dengan PT. Mandala Airlines di Jakarta sebagai staf di Divisi Engineering dari Juli 2002 hingga Januari 2006. Beliau mengundurkan diri dari pekerjaannya untuk melanjutkan S2. Dr. Uddin menyelesaikan program S2 dibidang control system dan robotic di School of Aerospace & Mechanical Engineering, Gyeongsang National University, di Korea Selatan pada tahun 2009. Dalam menempuh program S2 tersebut, Dr. Uddin mendapat beasiswa dari Brain Korea 21 Program.

Pendidikan dan Persiapan Profesional

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|---|---------------|--------------------|---------|------|
| Institut Teknologi Bandung | Indonesia | Teknik Penerbangan | S.T. | 2002 |
| Gyeongsang National University | Korea Selatan | Teknik Mesin | M. Eng. | 2009 |
| Norwegian University of Science and Technology (NTNU) | Norwegia | Cybernetics | Ph.D | 2016 |

Beasiswa, Hibah dan Penghargaan

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|-----------|---|
| 2006-2009 | Beasiswa S2 dari Brain Korea 21 Program |
| 2009-2013 | Beasiswa S3 dari Siemens Oil & Gas Norway |
| 2016 | Golden Feedback Loop Award, NTNU, Norway |

PATENT APPLICATION

J. T. Gravdahl and N. Uddin (Siemens AG), *Industrial Compressor System*, EP2423515, 2010.

Publikasi

- N. Uddin, W.A. Pramuditho, and T.A. Nugroho, "Passivity-Based Control for Two-Wheeled Robot Stabilization", accepted in the 2017 International Conference on Mechanical, Electronics, Computer, and Industrial Technology (MECnIT 2017) will be held in Medan, December 2017.

- b. **N. Uddin**, T.A. Nugroho, and W.A. Pramuditho, “*Stabilizing Two-Wheeled Robot Using Linear Quadratic Regulator and States Estimation*”, the 2nd International Conference on Information Technology, Information Systems and Electrical Engineering (ICITISEE-2017), Yogyakarta, Indonesia, November 1st – 3rd, 2017.
- c. **N. Uddin** “*Lyapunov-Based Control System Design of Two-Wheeled Robot*” the 2017 International Conference on Computer, Control, Informatics, and its Applications (IC3INA), Jakarta, Indonesia, October 23rd – 26th, 2017.
- d. **N. Uddin** and J.T. Gravdahl, “*Compressor Surge Control Design Using Linear Matrix Inequality Approach*”, the 5th International Conference on Instrumentation, Control and Automation 2017 (ICA 2017), Yogyakarta, Indonesia, August 9th -11th, 2017.
- e. I. Youn, M. A. Khan, **N. Uddin**, E. Youn, and M. Tomizuka. "Road disturbance estimation for the optimal preview control of an active suspension systems based on tracked vehicle model." *International Journal of Automotive Technology* 18, no. 2 (2017): 307-316.
- f. **N. Uddin** and J.T. Gravdahl, “*Two General State Feedback Control Laws for Compressor Surge Stabilization*”, The 24th Mediterranean Conference on Control and Automation, Athens, Greece, June 21st – 24th, 2016
- g. **N. Uddin** and J.T. Gravdahl, “*Active compressor surge control system by using piston actuation: Implementation and experimental results*”, The 11th IFAC Symposium on Dynamics and Control of Process Systems including Biosystems (DYCOPS-CAB 2016), Trondheim, June 6th – 8th, 2016.
- h. **N. Uddin** and J.T. Gravdahl, “*Bond graph modeling of centrifugal compressor systems*”, Simulation: Transactions of the Society for Modeling and Simulation International, Vol. 91(11), pp.998-1013, 2015
- i. I. Youn, R. Tchamna, S.H. Lee, **N. Uddin**, S.K. Lyu, M. Tomizuka, “*Preview suspension control for a full tracked vehicle*”, International Journal of Automotive Technology 15 (3), pp. 399-410, 2014.
- j. **N. Uddin** and J.T. Gravdahl, “*A Compressor Surge Control System: Combination Active Surge Control and Surge Avoidance*”, In proceedings of the 13th ISUAAAT, Tokyo, September 11th – 14th, 2012.
- k. **N. Uddin** and J. T. Gravdahl, “*Bond graph modeling of centrifugal compressor system*”, International Conference on Bond Graph Modeling (ICBGM) 12, Genoa, Italy, July 8th – 11th, 2012.
- l. **N. Uddin** and J.T. Gravdahl, “*Introducing Back-up to Active Compressor Surge Control System*”, IFAC Workshop on Automatic Control in Offshore Oil & Gas Production, Trondheim, June 2012.
- m. **N. Uddin** and J.T. Gravdahl, “*Active compressor surge control using piston actuation*”, Proc. ASME Dynamic Systems and Control Conference, Virginia, Oct 31st - Nov 2nd, 2011.
- n. I. Youn, **N. Uddin**, R. Tchamna and M. Tomizuka, “*Stochastic Optimal Preview Control of Active Suspension Systems Based on a Full Tracked Vehicle Model*”, Proceeding of 21st International Symposium on Dynamic of Vehicles on Roads and Tracks, Stockholm, Sweden, August 2009.
- o. **N. Uddin**, I. Youn and R. Tchamna, “*Estimator Design for Preview Control of Active Tracked Vehicle Suspension*”, Proceeding of ISMAI-03, Meiji University, Japan, Feb 2009
- p. I. Youn, S. Lee, **N. Uddin** and M. Tomizuka, “*Preview Suspension Control for a Full Tracked Vehicle*”, Proc. of Asia Pacific Automotive Engineering Conference, California, USA, Aug 2007
- q. M. Fadly, **N. Uddin** and H. Y. Sutarto, “*Flutter Suppression Using Neural Networks: Design and Implementation*”, Proc. of Experimental and Theoretical of Mechanics, Bali, Indonesia, 2002.