UNIVERSITAS
GADJAH MADA
Implementasi Metode Fuzzy Multiphase Markov Chain Pada Program Verifikasi Safety Integrity Level Berbasis Scilab
HERDIAN RADITYA, Dr.-Ing Awang N.I. Wardana ; Ir. Kutut Suryopratomo, M.T., M.Sc.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

[1] I. IEC, "61508 functional safety of electrical/electronic/programmable electronic safety-related systems," *International electrotechnical commission*, 1998.

[2] F. Innal, Y. Dutuit, and M. Chebila, "Safety and operational integrity evaluation and design optimization of safety instrumented system," *Reliability Engineering and System Safety*, vol. 134, pp. 32–50, 2015.

[3] W. Mechri, C. Simon, F. Bicking, and K. B. Othman, "Fuzzy multiphase Markov chains to handle uncertainties in safety systems performance assessment," *Journal of Loss Prevention in the Process Industries*, vol. 26, pp. 594–604, 2012.

[4] "Steam Turbine Failure During Overspeed Test," News Release Eskom Duvha Unit 4, Republic of South Africa, 9 Februari 2011.

[5] W. Mechri, C. Simon, F. Bicking, and K. Ben Othman, "Probability of failure on demand of safety systems by multiphase markov chains," in *Control and Fault-Tolerant Systems (SysTol), 2013 Conference on*. IEEE, 2013, pp. 98–103.

[6] J. J. Buckley and E. Eslami, "Fuzzy Markov Chains : Uncertain Probabilities," *Mathware and Soft Computing*, vol. 9, pp. 33–41, 2002.

[7] J. J. Buckley and L. J. Jowers, *Monte Carlo Methods in Fuzzy Optimization*. Birmingham: Springer, 2008.

[8] M. Boudreaux. "Differences in Fire and Gas Systems and Emergency Shutdown Systems," diakses dari www.emersonprocessexperts.com pada 8 Juni 2016.

[9] "ISA TR 84.00.02, Safety Instrumented Functions (SIF)–Safety Integrity Level (SIL) Evaluation Techniques," *Research Triangle Park, North Carolina*, 2002.

[10] H. C. Tijms, *A First Course in Stochastic Models*. Amsterdam: Wiley, 2003.

[11] Y. Dutuit, F. Innal, A. Rauzy, and J.-P. Signoret, "Probabilistic assessments in relationship with safety integrity levels by using Fault Trees," *Reliability Engineering and System Safety*, vol. 93, pp. 1867–1876, 2008.

[12] W. Mechri, C. Simon, K. BenOthman, and M. Benrejeb, "Uncertainty evaluation of Safety Instrumented Systems by using Markov chains," *International Federation of Automatic Control IFAC World congress Milano (Italy)*, 2011.

[13] L. A. Zadeh, "Fuzzy sets," *Information and control*, vol. 8, pp. 338–353, 1965.

UNIVERSITAS
GADJAH MADA
Implementasi Metode Fuzzy Multiphase Markov Chain Pada Program Verifikasi Safety Integrity Level Berbasis Scilab
HERDIAN RADITYA, Dr.-Ing Awang N.I. Wardana ; Ir. Kutut Suryopratomo, M.T., M.Sc.
Universitas Gadjah Mada, 2016 | Diunduh dari http://etd.repository.ugm.ac.id/

[14] M. Elsharif, "Comparison of Triangular and Gaussian Membership Functions Performance for a Fuzzy PD Controller for an Induction Motor Drive," Electrical and Computer Engineering Thesis, Dalhousie University, Halifax, Nova Scotia, 2009.

[15] A. M. Falaq, "Studi Penentuan *Safety Integrity Level* (SIL) pada Kompresor Udara," Skripsi Program Studi Teknik Fisika, Fakultas Teknik, Universitas Gadjah Mada, Yogyakarta, 2015.

[16] I. Rostaman, "Perancangan Desain Konseptual *Safety Instrumented System* (SIS) untuk Sistem *Furnace* pada Proses Suplai dan Pemanasan Minyak Mentah di Kilang Pusdiklat Migas Cepu (Berbasis ISA-TR84.00.02–2002: 2/3)," Skripsi Program Studi Teknik Fisika, Fakultas Teknik, Universitas Gadjah Mada, Yogyakarta, 2011.

[17] Y. Siagian, "Analisis Tingkat Keselamatan Sistem Otomasi Proses Pemisahan CO_2 di *Gas Plant* CNOOC SES Ltd." Skripsi Program Studi Teknik Fisika, Fakultas Teknik, Universitas Gadjah Mada, Yogyakarta, 2011.

[18] R. Chalupa, "Failure Modes, Effect and Diagnostic Analysis - United Electric One Series Electronic Switch ," Dokumen Teknik Exida FMEDA, UE 05/10-35 R001, USA, 2007.

[19] J. Hettenbach, "Failure Modes, Effect and Diagnostic Analysis Vibration Transducer," Dokumen Teknik Exida FMEDA, STAHL 13/06-082 R025, Germany, 2013.

[20] "SIL-3 Speed Sensor for Turbine Applications," Dokumen Teknik Woodward, Product Spec. 03429, USA, 2015.

[21] "System Design According To IEC/EN 62061-Common Cause Failure." Dokumen Teknik Estimasi Nilai CCF Rockwell Automation, Allen-Bradley. Diakses dari www.ab.com pada 22 Mei 2016.