

REFERENCE

- [Active fault zones in Thailand, 2015] Active fault zones in Thailand, Website: http://www.dmr.go.th/main.php?filename=fault_En, 16 September 2015.
- [ATC, 1985] ATC, “Earthquake damage evaluation for California,” ATC – 13 Report, Applied Technology Council, Redwood City, CA., 1985.
- [Beale *et al.*, 2013] Beale, M. H., Hagan M. T. and Demuth, H. B., “Neural Network Toolbox User’s Guide,” Text File: http://www.hylab.pe.kr/NFUpload/nfupload_down.php?tmp_name=20160309135131.8990.6.0&name=nnet_ug.pdf, 30 October 2013.
- [Charusiri *et al.*, 1999] Charusiri, P., Kosuwan, S., Lumjuan, A. and Wechbunthung, B., “Review of active faults and seismicity in Thailand,” Proceedings, GEOSEA’ 98 Proceedings Geol. Soc. Malaysia Bull. 43, Malaysia, December, 1999, pp. 653-665.
- [Chen and Scawthorn, 2003] Chen, W. F. and Scawthorn, C., *Earthquake engineering handbook*, CRC Press, 2003, ISBN: 0-8493-0068-1.
- [Deb and Kumar, 2004] Deb, S. K., and Kumar, G. S., “Seismic damage assessment of reinforcement concrete buildings using fuzzy logic,” Proceeding, 13th World Conference on Earthquake Engineering, Vancouver, B.C., Canada, No. 3098, 2004.
- [Department of Public works and Town of Country Planning, 2008] Department of Public works and Town of Country Planning, *Manual Techniques for Analyzing Database Layout*, Bangkok, 2008.
- [Earthquake, 2015] Earthquake, Website: <https://en.wikipedia.org/wiki/Earthquake>, 16 September 2015.

- [Ellingwood, 2001] Ellingwood, B. R., “Earthquake risk assessment of building structures,” *Reliability Engineering and System Safety*, Vol. 74, 2001, pp. 251 -262.
- [Erdik *et al.*, 2011] Erdik, M., Sesetyan, K., Demircioglu, M.B., Hancilar, U. and Zulfikar, C., “Soil Dynamics and Earthquake Engineering,” *Soil Dynamics and Earthquake Engineering*, Vol. 31, 2011, pp. 247-266.
- [FEMA, 1997] Federal Emergency Management Agency-FEMA, “NEHRP Recommended Provisions for Seismic Regulations for New Buildings,” FEMA 222A. Washington DC, USA. 1997.
- [FEMA, 1998] Federal Emergency Management Agency-FEMA, “Handbook for the Seismic Evaluation of Buildings,” *Seismic Evaluation Handbook FEMA 310*, Washington DC, USA, 1998.
- [FEMA, 2000] Federal Emergency Management Agency-FEMA, “Prestandard and commentary for the seismic rehabilitation of buildings,” FEMA 356, Washington DC, USA, 2000.
- [FEMA, 2001] Federal Emergency Management Agency-FEMA, “Earthquake loss estimation methodology,” *HAZUS 99 Technical Manual*, Service Release 2, Washington DC, USA, 2001.
- [FEMA, 2002a] Federal Emergency Management Agency-FEMA, “Rapid Visual Screening of Buildings for Potential Seismic Hazards,” *A Handbook FEMA 154*, 2nd ed., Washington DC, USA, 2002.
- [FEMA, 2002b] Federal Emergency Management Agency-FEMA, “Rapid Visual Screening of Building for Potential Seismic Hazards,” *Supporting Documentation FEMA 155*, 2nd ed., Washington DC, USA, 2002.

- [FEMA, 2003] Federal Emergency Management Agency-FEMA, “Multi-hazard loss Estimation Methodology – Earthquake Module,” HAZUS-MH MR1 Technical Manual, Washington DC, USA, 2003.
- [Grünthal, 1998] Grünthal, G., “European Macroseismic Scale 1998 EMS-98,” Text File: http://www.seisemfrance.fr/EMS98_Original_english.pdf, 12 September 2016.
- [Gurney, 1997] Gurney, K., *An Introduction to Neural Networks*, UCL Press, 1997, pp. 1, ISBN: 0-203-45874-5.
- [Haoxiang *et al.*, 2013] Haoxiang, H., Maolin, C., and Yongwai, L., “Earthquake damage assessment for RC structures based on fuzzy sets,” *Mathematical Problems in Engineering*, Vol. 2013, No. 254865, October 2013, pp. 1-8.
- [Hunsapinyo and Saicheur, 2013] Hunsapinyo, C. and Saicheur, K., “Earthquake loss estimation of Chiang Mai Municipal,” *Proceedings, 18th National Convention on Civil Engineering*, The Engineering Institute of Thailand, Chiangmai, Thailand, May 8-10, 2013.
- [Joghataie, 1994] Joghataie, A., *Neural Networks and Fuzzy Logic for Structural Control*, Ph.D. Thesis, Department of Civil Engineering, University of Illinois at Urbana – Champaign, 1994.
- [Kamran *et al.*, 2014] Kamran, V., Smith, N. J. and Amiri, G. G., “Fuzzy multicriteria for developing a risk management system in seismically prone areas,” *Socio-Economic Planning Sciences*, Vol. 48, 2014, pp. 235-248.
- [Lukkunaprasit, 2006] Lukkunaprasit, P., “Earthquake-related disaster mitigation the Thailand experience,” *Proceeding, 4th International Conference on Earthquake Engineering*, Taipei, Taiwan, No. 267, 2006.

- [Malczewski, 1999] Malczewski, J., *GIS and Multicriteria Decision Analysis*, 1st ed., Wiley Press, 1999, pp. 81-100, ISBN: 0-471-32944-4.
- [Malina *et al.*, 2010] Malina, S., Lang, D. H., Lindholm, C. D., “SELENA – An open-source tool for seismic risk and loss assessment using a logic tree computation procedure,” *Computer and Geosciences*, Vol. 36, 2010, pp. 257-289.
- [Meesad, 2012] Meesad, P., *Fuzzy System and Neural Network*, 1st ed., King Mongkut's University of Technology North Bangkok Press, 2012, ISBN: 974-620-777-6.
- [Nanda and Majhi, 2014] Nanda, R. P., and Majhi, D. R., “Rapid seismic vulnerability assessment of building stocks for developing countries,” *KSCE Journal of Civil Engineering*, Vol. 18, No. 7, 2014, pp. 2218-2226.
- [Nieto-Morote and Ruz-Villa, 2011] Nieto-Morote, A. and Ruz-Vila, F., “A fuzzy approach to construction project risk assessment,” *International Journal of Project Management*, Vol. 29, 2011, pp. 220-231.
- [Newmark and Hall, 1982] Newmark, N. M. and Hall, W. J., *Earthquake Spectra and Design*, Earthquake Engineering Research Institute (EERI) Monograph, Oakland, CA., 1982.
- [Nordeson *et al.*, 2000] Nordenson, G. J., Deodatis, P. G., Jacob, K. H. and Tantala, M. W., “Earthquake loss estimation for the New York city area,” *Proceeding, 12th World Conference on Earthquake Engineering*, Auckland, New Zealand, 2000.
- [Ornthammarath, 2014] Ornthammarath, T., “Seismic wave from Mae Lao Earthquake 5 May 2014,” *Proceeding, Mae Lao Earthquake in Chiang Rai lesson to learned*, Bangkok, Thailand, November 20, 2014, pp. 31-38.

- [Ornthammarath *et al.*, 2011] Ornthammarath, T., Warnitchai, P., Worakanchana, K., Zaman, S., Sigbjornsson, R. and Lai C. G., “Probabilistic seismic hazard assessment for Thailand,” *Bulletin of Earthquake Engineering*, Vol. 9, No. 2, 2011, pp. 367-394.
- [Palasri and Ruangrassamee, 2010] Palasri, C. and Ruangrassamee, A., “Probabilistic seismic hazard maps of Thailand,” *Journal of Earthquake and Tsunami*, Vol. 4, No.4, 2010, pp. 369-386.
- [Pananont *et al.*, 2014] Pananont, P., Habangkhem, S., Wongwai W., Pholsophon, P., Wechbunthung, B., Limpisawas, S., Kosuwan S., “Mainshock and aftershocks within 24 hours of the M 6.1 earthquake on May 5th 2014 in Chiang Rai Province, Northern Thailand from the Department of Mineral Resources ‘s Seismic Network,” *Proceeding, Mae Lao Earthquake in Chiang Rai lesson to learned*, Bangkok, Thailand, November 20, 2014, pp. 23-29.
- [Petersen *et al.*, 2007] Petersen, M., Harmsen, S., Mueller, C., Haller, K., Dewey, J., Luco, N., Crone, A., Lidke, D. and Rukstales, K., “Document for the Southeast Asia Seismic Hazard Maps,” Website: http://earthquake.usgs.gov/hazards/products/images/SEASIA_2007.pdf, 16 September 2015.
- [Reza *et al.*, 2013] Reza, H., Budic, Z. N., Akbar, A. R., Mohsen, N. and Hassan, H., “Interactive approach for GIS-based earthquake scenario development and resource estimate (Karmania hazard model),” *Comput. Geosci.* Vol. 51, 2013, pp. 324-338.
- [Ross, 2004] Ross, T. J., *Fuzzy logic with engineering applications*, Chichester, U.K. Wiley, 2004, pp. 101.
- [Ruangrassamee *et al.*, 2014] Ruangrassamee, A., Boonyatee, T., Chintanapakdee, C., Jankaew, K., Thanasisathit, N., Chandrangsu, T. and

Lukkunaprasit, P., “Lessons from the Mw 6.1 Mae Lao earthquake in Thailand on May 5, 2014 and implications for future design,” Proceeding, Mae Lao Earthquake in Chiang Rai lesson to learned, Bangkok, Thailand, November 20, 2014, pp. 115-136.

- [Saadat *et al.*, 2014] Saadat, S., Camp, C. V. and Pezeshk S., “Seismic performance-based design optimization considering direct economic loss and direct social loss,” *Engineering Structures*, Vol. 76, 2014, pp. 193-201.
- [Saaty, 1980] Saaty, T. L., *Analytic Hierarchy Process: Planning, Priority Setting, Resource Allocation*, McGraw-Hill Press, 1980, ISBN: 0-07-054371-2.
- [Saaty, 1987] Saaty, R. W., “The Analytic Hierarchy Process – What it is and How it used,” *Math Modelling*, Vol 9, No 3, 1987, pp. 161-176.
- [Saaty, 2008] Saaty, T. L., “Decision making with the analytic hierarchy process,” *International Journal of Services Sciences*, Vol. 1, No. 1, 2008, pp. 83-98.
- [Saicheur *et al.*, 2013] Saicheur, K., Hansapinyo, C., Damrongchai, P. and Teingburanatham, P., “Multi-Criteria Decision Making for Seismic Retrofitting of Reinforced Concrete School Buildings in Chiang Mai Municipal,” Proceedings, 18th National Convention on Civil Engineering, The Engineering Institute of Thailand, Chiang Mai, Thailand, May 8-10, 2013.
- [Saicheur, Hunsapinyo and Buachart, 2014] Saicheur, K., Hunsapinyo, C. and Buachart, C., “Spatial Earthquake Loss Estimation of Mae Chan Municipal, Chiangrai,” Proceedings, 19th National Convention on Civil Engineering, The Engineering Institute of Thailand, Khon Kaen, Thailand, May 14-16, 2014.

- [Saicheur and Hunsapinyo, 2016] Saicheur, K. and Hunsapinyo, C., “Structural repair prioritization of buildings damaged after earthquake using fuzzy logic model,” *Journal of Disaster Research*, Vol.11, No. 3, 2016, pp. 559-565.
- [Sen, 2010] Sen, Z., “Rapid visual earthquake hazard evaluation of existing buildings by fuzzy logic modeling,” *Expert Systems with Applications*, Vol. 37, 2010, pp. 5653-5660.
- [Sen, 2011] Sen, Z., “Supervised fuzzy logic modeling for building earthquake hazard assessment,” *Expert Systems with Applications*, Vol. 38, 2011, pp. 14564-14573.
- [Shedlock *et al.*, 2000] Shedlock, K., Giardini., D., Grunthal., G., and Zhang., P., “The GSHAP global seismic hazard map. Seismological,” *Research Letters*, Vol. 71, No. 6, 2000, pp. 679-689.
- [Simons *et al.*, 2007] Simon, W. J. F., Socquet, A., Vigny, C., Ambrosius, B. A. C., Abu, S. H., Promthong, C., Subarya, C., Sarsito, D. A., Matheussen, S., Morgan, P. and Spakman, W., “A decade of GPS in Southeast Asia: Resolving Sundaland motion and boundaries,” *Journal of Geophysical Research*, Vol. 112, 2007.
- [Sunda plate, 2015] Sunda plate (2015), Website:
https://en.wikipedia.org/wiki/Sunda_Plate, 16 September 2015.
- [Tanaka, 2008] Tanaka, S., “Building damage inspection analysis in the 2007 Niigata Chuetsu-Oki earthquake, Kashiwazaki: Self-inspection analysis for damage evaluation,” *Journal of Disaster Research*, Vol. 3, No. 6, 2008, pp. 372-380.
- [Tsfamariam and Saatcioglu, 2008] Tsfamariam, S. and Saatcioglu, M., “Seismic risk assessment of reinforced concrete buildings using fuzzy rule

based modeling,” Proceedings, 14th World Conference on Earthquake Engineering, Beijing, China, 2008

- [Vahdat *et al.*, 2014] Vahdat, K., Rajabi, M. A., Samadzadegan, F. and Shabani, S., “A geospatial neuro-fuzzy approach for identification of hazardous zones in regional transportation corridors,” *International Journal of Civil Engineering*, Vol. 12, No. 3, 2014, pp. 289-303.
- [Vahidnia *et al.*, 2009] Vahidnia, M. H., Alesheikh, A. A., Alimohammadi, A. and Hosseinali, F., “Landslide hazard zonation using quantitative methods in GIS,” *International Journal of Civil Engineering*, Vol. 7, No.3, 2009, pp. 176-189.
- [Wang and Goettel, 2007] Wang, Y. and Goettel, K. A., “Enhanced Rapid Visual Screening (E-RVS) Method for Prioritization of Seismic Retrofits in Oregon,” Text File:
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.370.348&rep=rep1&type=pdf>, 30 October 2013.
- [Warnitchai *et al.*, 2000] Warnitchai, P., Sangarayakul, C. and Ashford, S. A., “Seismic hazard in Bangkok due to long-distant earthquakes,” *Proceeding, 12th World Conference on Earthquake Engineering*, Auckland, New Zealand, January 30 – February 4, 2000, Vol. 5 (2145), pp. 1-8.
- [Wiwekwin and Kosuwan, 2014] Wiwekwin, W. and Kosuwan, S., “Mae Lao Earthquake in Chiang Rai and the Mae Lao Segment of the Phayao Fault,” *Proceedings, Mae Lao Earthquake in Chiang Rai lesson to learned, Bangkok, Thailand, November 20, 2014*, pp. 39-52.
- [Wood *et al.*, 2014] Wood, N., Ratliff, J., Schelling, J. and Weaver, C., “Comparing population exposure to multiple Washington earthquake scenarios for

prioritizing loss estimation studies,” *Applied Geography*, Vol. 52, 2014, pp. 191-203.

[Yeh *et al.*, 2006] Yeh, C. H., Loh, C. H. and Tsai, K. C., “Overview of Taiwan Earthquake Loss Estimation System,” *Natural Hazards*, Vol. 37, 2006, pp. 23–37.

[Youngs *et al.*, 1997] Youngs, R. R., Chiou, S. J., Silva, W. L. and Humphrey, J. R., “Strong ground motion attenuation relationships for subduction zone earthquakes,” *Seismological Research Letters*, Vol. 68, No. 1, 1997, pp.58-73.

[Zadeh, 1965] Zadeh, L. A., “Fuzzy sets,” *Information and Control*, Vol.8, 1965, pp.339-353.

[Zadeh, 1973] Zadeh, L. A., “Outline of a new approach to the analysis to the analysis of complex systems and decision process,” *IEEE Transactions on Systems Man and Cybernetics*, Vol. 3, 1973, pp. 28 – 44.

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