

ACADEMIC SHORT CV



Department of Civil and Environmental Engineering
The University of Tokushima
2-1 Minami-josanjima-cho, Tokushima 770-8506, Japan

NAME: Yoshifumi NARIYUKI

CURRENT POSION: Professor of Structural Engineering

Academic Qualifications:

- 1992 D.E. Structural Engineering, Kyoto University
- 1979 M.E. Engineering, The University of Tokushima
- 1977 B.E. Structural Engineering, The University of Tokushima

Memberships:

Japan Society of Civil Engineers, Japan Association for Earthquake Engineering,
Architectural Institute of Japan

Present and recent interests of research:

- Non-linear Seismic Response Analysis of Bridge Structures
- Elasto-plastic Damper with Multi Cables
- Damage Evaluation in Structures based on Modal Analysis
- Structural Analysis and Design of Pipe Houses
- Mechanical Characteristic of Gabion
- Priority of Seismic Retrofit of Existing Road Bridges
- Tsunami Evacuation Simulation
- Extraction of Damage Area from Aerial Photography

Research Publications:

1. Main Journal Articles:

Atsuhito NAKANO, Yoshihumi NARIYUKI and Takashi MINAMOTO : Fuzzy-based Detection of Debris in Aerial Images, Proc. of The 13th Japan Earthquake Engineering Symposium, pp. 612-619, 2010(in Japanese).

Takashi MINAMOTO and Yoshifumi NARIYUKI : Effect of Use of Walking Aid on Tsunami Refuge Safety of Area, Proc. of The 13th Japan Earthquake Engineering Symposium, pp. 669-674, 2010(in Japanese).

Takashi MINAMOTO, Yoshifumi NARIYUKI, Yasuhiro FUJIWARA and Atsushi MIKAMI : Development of Tsunami Evacuation Simulation System and Its Application to Assessment of Area Refuge Safety, Journal of Earthquake Engineering, Vol.30, pp. 757-767, 2009 (in Japanese).

Takashi MINAMOTO, Yoshifumi NARIYUKI, Mariko ABE and Hiromi SATO : Fundamental Study on Automatic Extraction Method of Areas with Damaged Houses Considering Direction

Characteristics of Edge Lines on Aerial Photo, Journal of Applied Computing in Civil Engineering, Vol.17, pp.233-242, 2008 (in Japanese).

Takashi MINAMOTO, Yoshifumi NARIYUKI, Yasuhiro FUJIWARA, Atsushi MIKAMI and Tsutomu SAWADA : Fundamental Study on Development of Practical Tsunami Evacuation Simulation System for Voluntary Disaster Preventing Organizations, Journal of Earthquake Engineering, pp.756-764, 2007 (in Japanese).

Yoshifumi NARIYUKI, Mariko ABE, Takashi MINAMOTO and Kiyoshi HIRAO : A Basic Study on Automated Detection of Debris from Wooden House Based on Edge Information of Aerial Photographs, Proc. of The 12th Japan Earthquake Engineering Symposium, pp.1402-1405, 2006(in Japanese).

Yoshifumi NARIYUKI, Takashi MINAMOTO, Jun OHKI and Kiyoshi HIRAO : Study on a Method of Assigning Order of Priority to Road Bridges Considering Change of Required Road Network after Earthquake, Proc. of The 12th Japan Earthquake Engineering Symposium, pp.1366-1369, 2006 (in Japanese).

Nariyuki Yoshifumi, Okamura Haruyo, Matsushima Yoshiaki, and Hirao Kiyoshi : A Study on Quantitative Evaluation of Landscape with Road Bridge Based on Averaged Curve of Outlines, Journal of Applied Computing in Civil Engineering, Vol.15, pp.207-210, 2006 (in Japanese).

Kiyoshi Hirao, Yukinori Sakagami, Yoshifumi Nariyuki and Tsutomu Sawada : A Study on Force-Displacement-Based Seismic Design of Single-Column RC Piers, Journal of Structural Mechanics and Earthquake Engineering, No.Vol. 21, No.2, pp.159s-174s, 2004.

Yoshifumi NARIYUKI, Ken-ichi KONDO and Kiyoshi HIRAO : Effect of Characteristics of Seismic Isolation Device on Damage of Bridge Piers under Strong Earthquakes, Proc. of The 10th Japan Earthquake Engineering Symposium, pp.2699-2704, 1998 (in Japanese).

Hongying Yuan, Kiyoshi Hirao, Tsutomu Sawada and Yoshifumi Nariyuki : A Study on Reducing the Measured Modes in Modal Analysis Inspection for Damage Assessment of a Structure, Journal of Structural Engineering, Vol.41A, pp.725-733, 1995.

Hongying Yuan, Kiyoshi Hirao, Tsutomu Sawada and Yoshifumi Nariyuki : Modal Analysis Method for Stiffness Degradation Identification of Non-proportionally Damped Structures, Journal of Structural Mechanics and Earthquake Engineering, Vol.11, No.2, pp.123-126, 1994.

Kiyoshi Hirao, Tsutomu Sawada, Yoshifumi Nariyuki and Syuji Sasada : The Effect of Frequency Characteristics and Duration of Input Earthquake Motion on the Energy Response of Structures, Journal of Structural Mechanics and Earthquake Engineering, No.386, pp.165-174, 1987.

2. Main Papers in Proceedings of World Conference:

Yuji Toyosaki, Yoshifumi Nariyuki, Sou Mitsuya and Toshihiro Konishi : Identification of Damage to Beam Structures using Modal Data, Proceedings of The 15th World Conference on Earthquake Engineering (15WCEE), Paper No. 2005, pp.1-10, Lisbon, Sep., 2012.

Kouichi Suchi, Yoshifumi Nariyuki, Yukiko Sedo and Atsushi Mikami : A Fundamental Study on

Development of a Verification System for Earthquake-Proof Measures for Furniture, Proc. of 14th WCEE, Paper ID: 05-01-0121, Beijing, China, Oct., 2008.

Takashi Minamoto, Yoshifumi Nariyuki, Yasuhiro Fujiwara and Atsushi Mikami : Development of Tsunami Refuge Petri-Net Simulation System Utilizable in Independence Disaster Prevention Organization, Proc. of 14th WCEE, Paper ID: 09-02-0018, Beijing, China, Oct., 2008.

Kiyoshi Hirao, Yoshifumi Nariyuki and Shuji Sasada : Effect of Restoring Force Model for Column-type RC Piers on Displacement Ductility Based Design, Proceedings of the 1st European Conference on Earthquake Engineering and Seismology, pp.Paper-No.737, Geneva, Sep. 2006.

Yoshifumi Nariyuki, Jun Ohki, Takashi Minamoto and Kiyoshi Hirao : Priority of Seismic Retrofit of Bridges considering Prevention of Isolated Areas after an Earthquake, Proceedings of the 1st European Conference on Earthquake Engineering and Seismology, pp.Paper-No.407, Geneva, Sep. 2006.

Takashi Minamoto, Yoshifumi Nariyuki, Jun Ohki and Kiyoshi Hirao : A Methodology of Importance Assessment of Road Bridges with Top Priority to Non-isolation of Damaged Areas, The 10th EASEC Proceedings (CD-ROM), Vol.6, pp.15-20, Bangkok, Aug. 2006.

Yoshifumi Nariyuki, Kiyoshi Hirao and Yuichiro Fukui : Discriminant Analysis Of Street-Blockades In Kobe City Due To The 1995 Hyogoken-Nanbu Earthquake, Proceedings (CD-ROM) of The 13th World Conference on Earthquake Engineering (13WCEE), No.paper no. 1296, pp.1-15, Vancouver, Aug. 2004.

Yoshifumi Nariyuki, Kiyoshi Hirao, Sasada Shuji and Kado Mineyasu : Characteristics of Displacement Ductility of Structures subjected to Strong Earthquakes, The 9th EASEC Proceedings (CD-ROM), No.paper no.290, pp.SME25-SME30, Bali, Dec. 2003.

Yoshifumi Nariyuki, Kiyoshi Hirao, Tsutomu Sawada and Kenichi Kondo : Interaction of nonlinear response between pier and isolator in seismically isolated bridges, Proceedings (CD-ROM) of The 12th World Conference on Earthquake Engineering (12WCEE), No.2100, pp.1-8, Auckland, Feb. 2000.

Taku Mikami, Kiyoshi Hirao, Tsutomu Sawada and Yoshifumi Nariyuki : A Study on Damage Design Spectra of Seismic Coefficient for Level 2 Earthquakes, Proceedings of The 7th East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-7), Vol.1, pp.734-739, Kochi, Aug. 1999.

Kiyoshi Hirao, Tsutomu Sawada, Yoshifumi Nariyuki and Syuji Sasada : Effect of Foundation Interaction on Inelastic Response of RC Piers, Proceedings of The 6th East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-6), No.Vol.3, pp.1681-1686, Taipei, Jan. 1998.

Yoshifumi Nariyuki, Kiyoshi Hirao, Tsutomu Sawada and Hongying Yuan : Required Initial Stiffness Ratio of MDOF Systems with Uniformly Distributed Seismic Damage, Proceedings of The 6th East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-6), No.Vol.3, pp.1597-1602, Taipei, Jan. 1998.

Kiyoshi Hirao, Syuji Sasada and Yoshifumi Nariyuki : Required Yield Strength Ratio Spectrum for Evaluation of Seismic Damage and Safety of SDOF Structures, Proceedings (CD-ROM) of The 11th World Conference on Earthquake Engineering (11WCEE), No.paper no. 691, pp.1-8, Acapulco, Mexico, July 1996.

Yoshifumi Nariyuki, Kiyoshi Hirao and Makio Karasudani : A Methodology for Seismic Damage Assessment of Simple Degrading Structures, Proceedings (CD-ROM) of The 11th World Conference on Earthquake Engineering (11WCEE), No.paper no. 695, pp.1-8, Acapulco, Mexico, July 1996.

Hongying Yuan, Kiyoshi Hirao, Tsutomu Sawada and Yoshifumi Nariyuki : Modal analysis for damage evaluation in structures, Proceedings of The 5th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-5), No.Vol.2, pp.1485-1490, Gold Coast Australia, July 1995.

Yoshifumi Nariyuki, Kiyoshi Hirao and Osamu Ohuchi : Inelastic Response of Bridge Structure with Seismic Isolator under Severe Earthquake, Proceedings of The 4th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-4), No.Vol.3, pp.1703-1708, Seoul, Sep. 1993.

Yoshifumi Nariyuki, Kiyoshi Hirao, Osamu Ohuchi and Hongying Yuan : Effect of Soil-Structure Interaction on the Displacement and Energy Ductilities of RC Piers under Severe Earthquakes, Proceedings of The 3rd East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-3), No.Vol.1, pp.779-784, Shanghai, April 1991.

Yoshifumi Nariyuki, Kiyoshi Hirao and Katsuho Ohgishi : Study on the Estimation of the Displacement Ductility of SDOF Structures subjected to Ground Motion, Proceedings of The 1st International Conference on Structural Engineering and Computation, pp.666-674, Beijing, April 1990.

Yoshifumi Nariyuki and Kiyoshi Hirao : Effect of Structural and Hysteretic Characteristics on Distribution of Input and Hysteretic Energy of MDOF Systems subjected to Seismic Excitation, Proceedings of The 9th World Conference on Earthquake Engineering (9WCCE), No.Vol.5, pp.123-128, Tokyo-Kyoto, Aug. 1988.