## **PRAMIN NORACHAN (Ph.D.)**

#### Address

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PERSONAL DETAILS	Nationality: Thai Born: December 4, 1979
EDUCATION	<ul> <li>Ph. D. in Civil and Environmental System Engineering (Structural Engineering), February 2012</li> <li>Konkuk University, Seoul, Korea.</li> <li>M Eng. in Structural Engineering, May 2005</li> <li>Asian Institute of Technology, Pathumthani, Thailand.</li> </ul>
	<b>B Eng.</b> in Civil Engineering (First Class Honor), March 2003 King Mongkut's Institute of Technology North Bangkok, Thailand.
ENGINEERING LICENSE	Professional Engineer in Civil Engineering (Thailand)
WORK EXPERIENCES	<ul> <li>AIT Solutions (Thailand), February 2012 – Present (Coordinator, Civil &amp; Structural Engineering Unit)</li> <li>Responsible for modeling, analysis, evaluation and design of buildings, performance-based seismic design of buildings, nonlinear modeling, analysis and design of structures, seismic evaluation and retrofit of existing buildings, BRB and CFRP design for strengthening and retrofitting RC structures.</li> <li>Project <ul> <li>Advisory services on performance-based seismic evaluation of building 1 of Hines Atrium Place, Gurugram, India</li> <li>Seismic evaluation and retrofit design of Campus One Bridgetowne East existing building using buckling restrained braces (BRB), Pasig City, Philippines</li> <li>Structural design review of diaphragm segments of the bridge No.13, Port Access Elevated Highway (PAEH) Project, Sri Lanka</li> <li>Structural design review of foundations for dynamic equipment of degassing pelletizer structure, Vietnam</li> </ul> </li> </ul>

- Structural system development code-based design review of One Gulshan Building, 15-story building, Bangladesh
- Performance-based seismic design of 8990 Urban Deca Cubao condominium project, 45-story residential building with precast bearing wall system, Philippines
- Performance-based seismic design of 5 buildings, Langsuan Village Project, 40-story building (APS), 33-story building (APL), 20-story building (APW), 17-story building (TPV), and 15-story building (LPV), Bangkok, Thailand
- Performance-based seismic design of 140-Wireless project, 23story office building, Bangkok, Thailand
- Performance-based seismic design of Plum condo project, 38-story residential building with precast bearing wall system, Nonthaburi, Thailand
- Seismic evaluation and retrofit of UNESCAP Secretariat and Service buildings, Bangkok, Thailand
- Seismic evaluation of Royal Textile Academy building, 3-story RC frame structure including 2-story basement levels, Thimphu, Bhutan
- Seismic Evaluation and Retrofit of Staff and Amenities Building,
   Hotel Yak and Yeti, 4-story RC frame building, Kathmandu, Nepal
- Experimental Seismic Fragility of Siam Gypsum Partition Walls, Bangkok, Thailand
- Performance-based seismic design of Hotel Nikko, Tumon, Guam
- Structural design review and re-design of the single-layer super reticulated steel domes with a large span of 86 m at wat Buddhasaengdham, Saraburi, Thailand
- Performance-based seismic evaluation and progressive collapse evaluation of Ireo City Office towers, 32-story office and 34-story hotel buildings, India
- Performance-based seismic evaluation of Roxas Triangle Towers (Tower 2), 55-story high-rise building, Makati City, Philippines
- Performance-based seismic evaluation of the tall building for Living Stone Project, 53-story building, Manila, Philippines
- Design review of amount of reinforcement surrounding at openings of precast concrete wall panels, Thailand
- Performance-based seismic evaluation of the Nepal Rastriya secondary school building Project, 5-story building, Kathmandu, Nepal
- Performance-based seismic evaluation of the La Durbar Convention Center Project, 3-story building, Kathmandu, Nepal
- Foundation design review of the tall building for Trump tower, Manila, Philippines
- Foundation design review of the tall building for M-Place Ortigas, Manila, Philippines
- Transfer slab design of the tall building for Studio A residential condominium, Quezon city, Philippines

	<ul> <li>FRP design for strengthening and retrofitting of Manila international airport project, Manila, Philippines</li> <li>Performance evaluation of Pruksa precast concrete wall between single and double layers of steel reinforcement, Thailand</li> </ul>
	<ul> <li>Palmer &amp; Turner (Thailand) Co., Ltd., January 2007–November 2007, and June 2005–October 2005</li> <li>Worked as a structural engineer responsible in analyzing and designing tall buildings, such as mat foundations, car parking, flat slab and structural parts of buildings.</li> <li>Project</li> <li>Modeling, analysis, and design of the Siri at Sukhumvit Project, 48-story residential building, Bangkok, Thailand</li> </ul>
COMPUTER SKILLS	<ul> <li>Programming Language and Software</li> <li>Visual Basic, Fortran 95, HTML, CSS, JavaScript, VBA,</li> <li>MATLAB, MathCAD, Maple 9,</li> <li>SAP2000, ETABS, PERFORM-3D, SAFE, CsiCOL, CsiBridge, AutoCAD,</li> <li>Microsoft Office</li> <li>Software Development</li> <li>PX (Perform-3D eXtension) - Extended Pre and Post Processing</li> <li>Software for PERFORM-3D</li> </ul>
HONOR	<b>Royal Thai Government (RTG)</b> Full scholarship for the master's degree in engineering, Asian Institute of Technology, Thailand.
TEACHING	<ul> <li>AIT Classes, 2015 – Present</li> <li>Overview of finite element modeling and analysis of tall buildings, CE 72.32 – Design of Tall Buildings.</li> <li>Introduction to ETABS (Basic Concepts and Tools), CE 72.32 – Design of Tall Buildings.</li> <li>Seismic design of cast-in-place concrete diaphragms, chords and collectors, CE 72.32 – Design of Tall Buildings.</li> <li>Design of reinforced concrete foundations, CE 72.32 – Design of Tall Buildings.</li> <li>Prestressed concrete (basic concepts), CE 72.52 – Advanced Concrete Structures.</li> <li>Retrofit and design of RC buildings (basic concepts), CE 72.52 – Advanced Concrete Structures.</li> <li>Retrofit and design of RC buildings (FRP design for RC members), CE 72.52 – Advanced Concrete Structures.</li> </ul>

 Introduction to MATLAB, CE 72.52 – Advanced Concrete Structures.

### Seminar on Designing of Special Structural Members for Earthquake Resistance, Thailand Concrete association (TCA), Bangkok, Thailand, 2019

- Seismic design of cast-in-place concrete diaphragms, chords and collectors, general concepts & design examples.

### Seminar on New Approaches of Structural Design for Earthquake Resistance, Thailand Concrete association (TCA), Bangkok, Thailand, 2019

- Performance-based seismic design of tall buildings

#### Seminar on Precast Concrete Structural Systems: The Future and Applications in Building Industry in Myanmar, Yangon, Myanmar, 2018

Performance-based seismic evaluation of hybrid structural systems.

### Seminar on Modelling, Analysis, Evaluation and Construction of High-Rise Buildings, Thailand Concrete association (TCA), Bangkok, Thailand, 2018

Performance-based seismic design of tall buildings, general concepts & case studies.

# Technical Seminar and Workshop on Performance-based Structural Design of Tall Buildings, Bangkok, Thailand, 2018

- Performance-based seismic design of tall buildings, case studies.

### Seminar and Workshop on Design of Tall Buildings: Trends and Advancements for Structural Performance, Bangkok, Thailand, 2016

- Seismic design of cast-in-place concrete diaphragms, chords and collectors, and seismic design of reinforced concrete foundations.

### Seminar on Technologies of Seismic Strengthening of Buildings, Chiang Mai, Thailand, 2015

 Nonlinear modeling and analysis of buildings using commercial finite element programs, and examples of seismic evaluation and strengthening of reinforced concrete buildings.

### Rajamangala University of Technology Tawan-ok: Uthenthawai Campus Classes, 2014 – 2015

- Structural dynamics and building design, Advanced Theory of Structure, 07-12-503.

ACTIVITIES	7 <sup>th</sup> Asia Conference on Earthquake Engineering, Seismic Resilience for Safer Cities and Infrastructures, Bangkok, Thailand, 2018 Session chair of the event.
	<b>Concrete Training Project, Thailand, 2003</b> Concrete technology tutor at King Mongkut's Institute of Technology North Bangkok.
	<b>Thai-German Engineering Project (TEP), Thailand, 2000</b> Mathematics and Physics tutor at King Mongkut's Institute of Technology North Bangkok.
THESIS & DISSERTATION	<b>Doctoral Degree</b> A Co-Rotational 8-node Solid-Shell Element for Three-Dimensional Analysis of Prestressed Concrete Structures.
	Master's Degree Design Improvement of R/C Interior Beam-Column Joint in Low to Moderate Seismic Risk Region.
	<b>Bachelor's Degree</b> Behavior of Concrete Mixed with Shreded Poryethylene Tetraphalate (PET) plastic.
RESEARCH AREAS	Performance-based seismic design of tall buildings Seismic evaluation and retrofit of buildings Structural design of precast concrete buildings Development of a finite element program XFINAS Geometrical and material nonlinearities base on FEM Construction stage analysis of prestressed concrete bridges Time-dependent analysis of prestressed concrete structures Simulation of wave and current forces on offshore structures
PAPERS & CONFERENCES	Pramin Norachan, Ki-Du Kim, Eugenio Onate, Analysis of Segmentally Constructed Prestressed Concrete Bridges using Hexahedral Element with Realistic Tendon Profiles, <b>Journal of Structural Engineering</b> (ASCE), Vol. 140(6), 2013.
	Pramin Norachan, Songsak Suthasupradit, Ki-Du Kim, A co-rotational 8-node degenerated thin-walled element with assumed natural strain and enhanced assumed strain, <b>Finite elements in analysis and design</b> , Vol. 50, 70–85, 2012.

Bunlue Kimuam, Pramin Norachan, and Nonthachat Kunprapha, Seismic Evaluation and Retrofit of an Existing Reinforced Concrete School Building in Northern Thailand, **The 22<sup>nd</sup> National Convention on Civil Engineering, Nakhon Ratchasima, Thailand**, 2017

Phirawat Chantharin, Pramin Norachan, and Nonthachat Kunprapha, A Comparison of Nonlinear Static and Dynamic Analyses of RC Buildings under Seismic Loads, **The 22<sup>nd</sup> National Convention on Civil Engineering, Nakhon Ratchasima, Thailand**, 2017

Naveed Anwar, Thaung Htut Aung, Pramin Norachan, and Wanassanun Kerlken, Case Study: Performance-base Design of Ductile Core Wall Building, **EASEC-14, Structural Engineering and Construction Conference, Ho Chi Minh City, Vietnam**, 2016

Naveed Anwar, Pramin Norachan, Thaung Htut Aung, Challenges of a Single-Layer Reticulated Inverted Monk Bowl, IABSE Conference – Structural Engineering: Providing Solutions to Global Challenges, Geneva, Switzerland, 2015

N. Anwar, P. Norachan, P. Warnitchai, T. Htut Aung, An Overview of Analysis and Design of a Single-Layer Reticulated Inverted Monk Bowl Dome, **The 7<sup>th</sup> Regional Symposium on Infrastructure Development**, **Bangkok, Thailand**, 2015

Pramin Norachan, Ki-Du Kim, Kyung-Chul Kim, Time-dependent analysis of PWR prestressed concrete containment considering realistic tendon profile, **The 2011 World Congress on Advances in Structural Engineering and Mechanics** 

Pramin Norachan, Ki-Du Kim, Finite Element Analysis of Offshore Wind Turbines under Environmental Loadings, **The 6<sup>th</sup> International Symposium on Steel structures (ISSS)**, 2011.

Songsak Suthasupradit, Panot Chobsilprakob, Pramin Norachan, Ki-Du Kim, A co-rotational 9-node assumed strain element for large diaplacement elasto-plastic analysis of plates and shells, **Conference of Korean Society of Steel Construction**, 2008.

Panot, Songsak, Pramin, Kim Ki-Du, A Nonlinear Co-Rotational Quasi-Conforming 4-Node Shell Element using Ivanov-Ilyushin Yield Criteria, Journal of Korean Society of Steel Construction, 20 (2008) 409-419.

Se-Hun Lee, Songsak Suthasupradit, Panot Chobsilprakob, Ki-Du Kim, Pramin Norachan, Jae-Yoon Cha, Large Displacement Elasto-Plastic Analysis of Shell Structures Using an Eight-Node Solid-Shell Element ,International Symposium on Steel Structures, 2009. Sacharuck Pornpeerakeat, Panot Chobsilprakob, Pramin Norachan, Ki-Du Kim, Kim Do, Nonlinear Formulation of Biot's Consolidation via Enhanced Assumed Strain Method, **Advances in Structural Engineering and Mechanics (ASEM)**, 2008.

**REFERENCE**Naveed Anwar, Ph.D., Vice President for Knowledge Transfer, AIT<br/>Consulting Director, ACECOMS, Affiliate Faculty, Structural<br/>Engineering, AIT, Pathumthani, Thailand.<br/>Email mailto:KIMKD@KONKUK.AC.KRnanwar@ait.asia

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Professor Kim Ki-Du, Department of Civil and Environmental System Engineering, Konkuk University, Seoul, Korea. Email kimkd@konkuk.ac.kr