

EXPERIENCE

February 2003 – present AJIISS Structural Engineering, Plano, Texas Structural Engineer / Proprietor

Has been providing forensic engineering consulting services in the states of Alabama, California, Florida, Georgia, Louisiana, Massachusetts, Missouri, New York, Oklahoma, Oregon, Rhode Island, Tennessee, Texas, and Virginia. Services include assessment and determination of the cause and origin of structural damage and failures, construction related failures and issues, foundation issues, moisture intrusion, fire & explosion damage to residential, commercial and industrial buildings.

January 2001–January 2003

Doyle Engineering Group, Dallas, Texas

Structural Engineering Designer / Project Manager

- Performed structural design, analyses, and investigations of commercial and industrial buildings and structures in the states of Texas and Oklahoma.
- Designed and analyzed buildings and structures using 3D finite element structural models (RAM Advanse).

1998–2000 AJIISS Co. Ltd, Tsukuba, Japan Structural Engineer / Proprietor

Managed and coordinated the following projects:

- Research projects on steel and reinforced concrete structures in collaboration with the University of Tsukuba;
- Finite Element Structural analyses (using ADINA) of a newly developed structural steel reinforced concrete hybrid beam-column connection for Daisue Construction Corporation;
- Creation and analyses (Finite Element Analysis) of the structural response of a trapezoidal steel frame for high rise buildings subjected to seismic loads – for Daisue Construction Corporation;
- Finite element analyses of the structural behavior of a child's car seat when subjected to impact of car collision. – for NewtonWorks Corporation;
- Finite Element Structural analyses of a rubber cap under constant pressure inside an electronic device. – for NewtonWorks Corporation;
- Finite Element Simulation of the impact behavior of a free-falling cellular telephone using finite element analysis. – for NewtonWorks Corporation;
- Finite Element Press-fit structural analysis of a steel rod inserted into a smaller hole of a plate;

1997–1998 Shimizu Construction Corp Tokyo, Japan Structural Engineering Analyst

- Finite Element Structural analyses (using DIANA and ALISS) of reinforced concrete mat foundation - steel pile interaction for the construction of a nuclear power plant in Japan;
- Simulated the results of actual foundation pile experimental investigations;

- Analyzed the interaction between soil and superstructure of a nuclear power plant;
- Recommended a structural model to simulate the real action of foundation and piles when acted upon by earthquake loads.

1991-1997

University of Tsukuba, Ibaraki, Japan

Researcher / Graduate Student

- Tested 2/3 scale and full scale specimens for reinforced concrete building structures;
- Developed a computer program to simulate the behavior of precast concrete structural wall connections:
- Theoretical analyses of precast reinforced concrete structural walls.
- Published research papers.

1988 - 1990

Building Research Service, Quezon City, Philippines.

Science Research Associate

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- Created prefabricated ferrocement wall and roof panels for home building;
- Performed experiments to investigate the structural behavior of ferrocement;
- Presented the results of experimental investigation through a research paper;
- Constructed a model house to demonstrate the use of prefabricated ferrocement wall and roof panels.
- Managed the construction of a model house using newly developed prefabricated Ferro cement wall and roof panels
- Prepared a book report for submission to the funding government agency.

1987 - 1988

Toyo Construction Corp., Manila, Philippines.

Construction Engineer

- Investigated the cause of delay of the Yazaki Torres building construction.
- Supervised the construction activities in order to finish the construction on time.

1985 - 1987

DCCD Engineering Corp., Makati, Philippines.

Structural Engineer

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Structural analyses and designs of civil works structures such as bridges and culverts, and structural analyses and design of 20 school buildings.

1989 - 1990

Univ. of the Philippines, Quezon City, Phils.

Part time Lecturer / Assistant Professor

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Taught Structural Design and Analysis, Strength of Materials, and Engineering Mechanics to undergraduate students

1989 - 1990

Ateneo de Manila University, Manila, Philippines.

Part time Lecturer / Assistant Professor

Taught Computer Aided Structural Analysis to practicing engineers

1989 - 1990

Technical Panel for Engineering Education, *Ministry of Education, Culture and Sports*, Philippines. Technical Consultant

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Inspected and evaluated five Engineering schools in the Philippines

1985 - 1990

De La Salle University, Manila, Philippines.

Part time Lecturer / Assistant Professor

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❖ Taught Strength of Materials, Engineering Mechanics, Surveying, Differential Equations, Numerical Methods, Differential and Integral Calculus, Analytic Geometry, Plane Trigonometry, Algebra, Engineering Drawing, and Computer Programming.

SCHOLARSHIPS AND AWARDS

1991-1997

University of Tsukuba, Ibaraki, Japan

Recipient of Monbusho (Japan Ministry of Education) scholarship for Japanese Language course, Master's degree and Doctoral degree.

1995

Japan Concrete Institute, Hiroshima, Japan

Awarded for Best Research Paper presentation, Japan Concrete Institute Annual Conference, 1995, Hiroshima, Title of paper: Seismic Behavior of Precast Shear Walls with Bar Splices Confined to Spiral Steel.

1995

University of Tsukuba Ibaraki, Japan

Awarded gold medal in the International Speech Contest (in Japanese Language) with 15 contestants from different countries including two contestants from Japan.

1990

Asian Inst. of Management Makati, Philippines

Recipient of Philippine National Engineering Center Grant to study construction management.

1979 - 1984

Univ. of the Philippines Quezon City, Philippines.

Recipient of Philippine State Scholarship for Bachelor's degree.

- 2001 Granted by U.S. *Immigration and Naturalization Service* an O-1 non-immigrant status "as a person of extraordinary ability in the field of Structural Engineering".
- 2002 Recipient of the *US INS EB-1 Priority Workers* for immigrant status— for Foreign nationals of extraordinary ability in the sciences, arts, education, business or athletics.

PROFESSIONAL ORGANIZATION

Member, International Association for Bridge and Structural Engineering

LANGUAGES

Pilipino, English, Japanese

Improve run down homes and convert into investment properties

PROFESSIONAL LICENSE

- Licensed Professional Engineer in the State of Texas
- Licensed Civil Engineer in the Philippines

EDUCATION

- PhD Structural Engineering 1994–1997 University of Tsukuba, Tsukuba Science City, Ibaraki, Japan Under Japanese Government (Monbusho) Scholarship
- Title of Dissertation: "Behavior and Failure Mechanism of Spirally Confined Lap Splice for Precast Concrete Structural Walls Under Tensile and Seismic Loads"

1992–1994 *University of Tsukuba* Tsukuba Science City, Ibaraki, Japan

- Master of Science in Engineering (Structural Engineering).
- Under Japanese Government (Monbusho) Scholarship
- Master's thesis: "An Experimental Study on the Tensile Capacity of Vertical Bar Joints in a Precast Shear Wall"

1990 Asian Inst. of Management Makati, Philippines

- Construction Management
- Under Philippine National Engineering Center Grant

1984–1989 Univ. of the Philippines Quezon City, Phils.

- Master of Science in Civil Engineering.
- Master's thesis: "An Investigation on the Repairability of Ferrocement"
- 1979–1984 *Univ. of the Philippines* Quezon City, Phils.

 Bachelor of Science in Civil Engineering Under Philippine National State Scholarship

PUBLICATIONS

- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, An Experimental Study on the Tensile Capacity of Vertical Bar Joints in a Precast Shear Wall, Proceedings of the Japan Concrete Institute, 1993, Vol. 15, No. 2, pp. 1255-1260.
- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, Tensile Capacity of Main Bar Splice at a Reduced Precast Shear Wall Thickness, Proceedings of the Japan Concrete Institute, 1994, Vol. 16, No. 2, pp. 1371-1376.
- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, Seismic Behavior of Precast Shear Walls with Bar Splices Confined to Spiral Steel, Proceedings of the Japan Concrete Institute, 1995, Vol. 17, No. 2, pp. 285-290.
- Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, A Study on the Resistance Mechanism of Spliced Bar Joints for Precast Concrete Shear Walls, Proceedings of the Japan Concrete Institute, 1996, Vol. 18, No. 2, pp. 923-928.
- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, Local Structural Behavior of Precast Shear Walls with Spirally Confined Lap Splices Under Seismic Loads, Proceedings of the Japan Concrete Institute, 1997, Vol. 19, No. 2.
- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, An Experimental Study on the Tensile Capacity of Vertical Bar Joints in a Precast Shear Wall, Proceedings of the 4th International Conference on Structural Failure, Durability and Retrofitting, Singapore, 1993, pp 431-438.

- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, Spiral Steel Confinement of Vertical Bar Connection in Precast Shear Walls, Proceedings of the International Conference on Concrete Under Severe Conditions, Hokkaido, Japan, 1995
- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, Seismic Behavior of Precast Shear Walls with Bar Splices Confined to Spiral Steel, Proceedings of the 5th East Asia - Pacific Conference on Structural Engineering and Construction, (EASEC-5) Queensland, Australia, 1995
- Jose Caringal Adajar and Teruaki Yamaguchi, New Connection Method for Precast Shear Walls, Proceedings of the Eleventh World Conference on Earthquake Engineering, Acapulco, Mexico, 1996
- ❖ Jose Caringal Adajar and Hiroshi Imai, Analysis of the Structural Behavior of Spirally Confined Main Bar Connection for Precast Structural Walls, Association of Structural Engineers of the Philippines, Proceedings of the 7th International Convention: Structural Engineering: Facing the Challenge of Economic Growth, Manila, Philippines, May 15 ~ 17, 1997.
- ❖ Primo Allan ALCANTARA, Jose Caringal Adajar and Hiroshi Imai, The Shear Peformance of Precast Concrete Columns Using the Main Bar Post-Insertion System, Association of Structural Engineers of the Philippines, Proceedings of the 7th International Convention: Structural Engineering: Facing the Challenge of Economic Growth, Manila, Philippines, May 15 ~ 17, 1997.
- ❖ Jose Caringal Adajar and Hiroshi Imai, Seismic Response of Monolithic and Precast Concrete Structural Walls with Post-Inserted Main Bars, Proceedings of the 4th International Symposium on Noteworthy Developments in Prestressing and Precasting, Singapore, July 3 ~ 4, 1997.
- ❖ Jose Caringal Adajar and Hiroshi Imai, Tensile Behavior of Spirally Confined Lap Splice for Precast Shear Walls Structural Engineers World Congress, San Francisco, California, USA, July 18 ~23, 1998.
- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, An Experimental Study on the Tensile Capacity of Vertical Bar Joints in a Precast Shear Wall, Transactions of the Japan Concrete Institute, 1993, Vol. 15, pp. 557-564.
- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, Tensile Capacity of Main Bar Splice at a Reduced Precast Shear Wall Thickness, Transactions of the Japan Concrete Institute, 1994, Vol. 16. No. 2.
- Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, Seismic Behavior of Precast Shear Walls with Bar Splices Confined to Spiral Steel, Transactions of the Japan Concrete Institute, 1995, Vol. 17, No. 2, pp. 189-196.
- ❖ Jose Caringal Adajar, Teruaki Yamaguchi and Hiroshi Imai, A Study on the Resistance Mechanism of Spliced Bar Joints for Precast Concrete Shear Walls, Transactions of the Japan Concrete Institute, 1996, Vol. 18, No. 2.
- ❖ Jose Caringal Adajar and Hiroshi Imai, Behavior of Spirally Confined Lap Splice for Precast Shear Walls Under Tension Journal of the Architectural Institute of Japan, July, 1997.
- ❖ Jose Caringal Adajar, Toshiyuki KANAKUBO, et. al., Hybrid Reinforced Concrete Column Steel Beam Connection, International Conference for Structural Engineering and Construction 2, Rome, Italy, September 23-26, 2003.
- ❖ Jose Caringal ADAJAR, Toshiyuki KANAKUBO, Masahiro NONOGAMI, Nobuo KAYASHIMA, Yasuhisa SONOBE, M. FUJISAWA, An Analysis of the Behavior of Hybrid Steel Beam RC Column Connection, 13th World Conference on Earthquake Engineering, Vancouver, Canada, August 1 6, 2004.
- Jose Caringal ADAJAR, Tim Hogue, Collin Jordan, Ferrocement for Hurricane-Prone State of Florida, Structural Faults + Repair – 2006 Conference, Edinburgh, Scotland, June 13-15, 2006.
 - (10 Papers in Japanese Language not included but available upon request)