

Wan, Yew Kong Mark

Education

- 8/00-5/03 **University of California, Berkeley**
B.S. Civil and Environmental Engineering (Highest Honors)
Emphasis in Structural Engineering, Mechanics and Materials
Cumulative GPA: 3.96 Upper Division Technical GPA: 4.000
- 8/03-5/04 **University of California, Berkeley**
M.S. Structural Engineering, Mechanics and Materials (SEMM)
Department of Civil and Environmental Engineering
GPA: 3.96

Honors and Awards

- 8/00 Overseas Merit Scholarship by the Defense Science and Technology Agency, Singapore
- Fall 2000-present Semester Honors Distinction in the College of Engineering, UC Berkeley
- 10/01 ASCE Golden Gate Branch Scholarship
- Dec 2001 Tau Beta Pi Engineering Honor Society
- Dec 2001 Chi Epsilon Civil Engineering Honor Society
- Spring 2001 National Society of Collegiate Scholars
- Spring 2002 Golden Key International Honor Society
- 6/24/02 National Concrete Canoe Competition (Overall 9th, Best Design Paper)
- Fall 2002 The National Dean's List, 2001-2002
- Fall 2002 Pacific Earthquake Engineering Research Center (PEER) Earthquake Engineering Scholar Award
- Spring 2003 Civil and Environmental Engineering Department Citation, UC Berkeley
- Spring 2003 Tau Beta Pi Fellowship
- Spring 2003 Mid-Pacific Regional Concrete Canoe Competition (Overall Champions, Best Technical Paper, Best Presentation, Best in Races, 2nd place for Final Product)
- Summer 2003 National Concrete Canoe Competition (Overall 3rd Place, Best Technical Paper, 2nd place Presentation, Tony P. Crest Innovation Award)
- Fall 2003 William H. Popert Graduate Fellowship Awarded by the Department of Civil and Environmental Engineering, UC Berkeley

Experience

- 8/01-12/01 **Department of Mathematics, University of California, Berkeley – Berkeley, CA**
Grader
-Graded homework for course in Linear Algebra and Differential Equations
- 6/02-8/02 **Department of Mathematics, University of California, Berkeley – Berkeley, CA**
Grader
-Graded homework for course in Multivariable Calculus
- 7/02-12/02 **Department of Civil and Environmental Engineering, University of California, Berkeley – Berkeley, CA**
Research Assistant
-Prepared and measured length change of various concrete specimens subject to ASR expansion
-Prepared concrete specimens to determine reactivity due to Alkali Silicate Reaction
-Supervised by Prof. Claudia P. Ostertag, SEMM
- 8/02-present **Concrete Canoe Team, University of California, Berkeley – Berkeley, CA**
Structural Engineer
-Part of a team that designed, built, and raced a canoe constructed out of concrete
-Responsibilities included concrete mix design, structural analysis and reinforcement design
-Performed structural analysis of the concrete canoe using SAP 2000 (finite element analysis) and XTRACT (reinforced concrete section analysis)
-Produced a superior concrete mix utilizing mineral admixtures, chemical admixtures, and polymeric fibers
- 8/02-12/02 **Pacific Earthquake Engineering Research Center (PEER) – Richmond, CA**
Earthquake Engineering Scholars' Course (EESC) Participant

-Attended a series of seminars at UC Irvine, UC San Diego, UC Los Angeles and UC Berkeley on Earthquake Engineering
-Interacted with distinguished experts in Earthquake Engineering from the region as well as top students from PEER affiliated colleges

- 9/02-present* **Department of Civil and Environmental Engineering, University of California, Berkeley – Berkeley, CA**
Undergraduate Study Committee (UGSC) Student Representative
-Represented the Civil Engineering department’s undergraduate student body at UGSC meetings
-Discussed and debated internal issues such as changes to course curriculum and how it would affect students
-Addressed the department’s position on a variety of College of Engineering issues
- 2/03-5/03* **Department of Civil and Environmental Engineering, University of California, Berkeley – Berkeley, CA**
Grader
-Graded homework for course in Concrete Materials and Construction
- 7/03-8/03* **Department of Civil and Environmental Engineering, University of California, Berkeley – Berkeley, CA**
Research Assistant
-Assisted in finite element modeling and graphic rendering for “Vanadium Microalloyed Steel Case Study: Applications in Blast-Resistance of Buildings”
-Supervised by Prof. Abolhassan Astaneh-Asl, SEMM
- 1/04-5/04* **Department of Civil and Environmental Engineering, University of California, Berkeley – Berkeley, CA**
Graduate Student Instructor
-Teaching assistant for SEMM graduate class in “Advanced Steel and Composite Design”
-Duties included holding office hours and discussion sections, grading exams, and preparing solutions and instructional material
- 8/03-8/04* **Department of Civil and Environmental Engineering, University of California, Berkeley – Berkeley, CA**
Independent Graduate Research (Masters Thesis)
-Investigated the behavior of single plate steel shear connections in combined shear and tension using 3-dimensional finite element analysis
-The objective is to provide design recommendations for such connections under unusual loading that may occur in the event of a blast or strong earthquake
-Supervised by Prof. Abolhassan Astaneh-Asl, SEMM

Societies and Positions Held

- 8/00-present* Singapore-Malaysia Student Association at Berkeley (Member)
8/01-5/02 American Society of Civil Engineers—UC Berkeley Student Chapter (Publicity Chair)
5/02-7/02 UC Berkeley Concrete Canoe Team (Member)
6/02-present American Society of Civil Engineers—UC Berkeley Student Chapter (Member)
8/02-present UC Berkeley Concrete Canoe Team (Structural Engineer)
12/02-present Tau Beta Pi Honor Society – California Alpha Chapter (Publicity Committee)
2/03-present Californians, Class of 2003 (Senior Week Committee)

Additional Skills

AutoCAD 2000i, MATLAB 6.0, MS Word, MS Excel, MS Powerpoint, SAP 2000, MSC Patran/Dytran/Nastran, FEAP, BiSpec, Xtract

Other Certification/Experience

- 6/98* Certified Paramedic Level I (School of Military Medicine, Singapore)
6/98 Certified Combat Medic Level I (School of Military Medicine, Singapore)
1/98-5/00 Served as Infantry Combat Medic in the Singapore Armed Forces
6/02 Engineer-In-Training (EIT) Certification