

Nikos J. Mourtos

I. PERSONAL

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II. EDUCATION

1983-1987 Ph.D., Aeronautical & Astronautical Engineering, Stanford University.
1982-1983 ENGINEER, Aeronautical & Astronautical Engineering, Stanford University.
1980-1982 M.S., Aeronautical & Astronautical Engineering, Stanford University.
1975-1980 B.S., Mechanical Engineering, University of Patras, Greece.

Short Courses & Workshops Attended

07Jun.2017 Flipped Learning, SJSU.
03-05Feb.2016 UAV Design w. D. P. Raymer, UCLA.
16Oct.2015 The CSU New Department Chairs 19th Annual Workshop, CSU Long Beach, California.
20Feb.2010 ABET Faculty Workshop on Sustainable Assessment Processes w. G. Rogers, Las Vegas, Nevada.
26Oct.2006 Seeing Faculty as Learners: Three Theoretical Frameworks for Faculty Development w. J. Froyd & J. Layne, Professional and Organizational Development Network in Higher Education Conference, Portland, Oregon.
25Oct.2006 Leading your own workshop on Course Design w. Dee Fink, Professional and Organizational Development Network in Higher Education Conference, Portland, Oregon.
19-20Jan.2005 Working with Others: Communicating more effectively to get the results we want, Cadence University, San Jose, California.
17Oct.2003 SNAME ABET Program Evaluator Training, San Francisco, California.
01May2003 Assessment, workshop w. Joni E. Spurlin, SJSU.
14Mar.2003 Helping new faculty members get off to a good start: A workshop for Administrators and Mentors, w. R. Felder & R. Brent, SJSU.
31Oct.2001 Virtual laboratories in engineering education, w. Prof. Klaus Schilling, SJSU.
31Mar-01Apr.2001 ABET Workshop on Engineering Criteria 2000, Los Angeles, California.
22-23Oct.1998 Teaching Effectiveness Workshop, w. R. Felder & R. Brent, FAMU.
01-03Oct.1998 Pacific Crest Teaching Institute, w. D. Apple, SJSU.
15Sep.1998 Portfolios: What are they good for?, w. G. Rogers, NSF/ASEE visiting scholar, SJSU.
16Apr.1998 NSF Shaping the Future of Undergraduate Engineering Education in Science, Mathematics, Engineering & Technology, SJSU.
12Mar.1998 Outcomes Assessment in Engineering Education, w. G. Rogers, NSF/ASEE visiting scholar, SJSU.
16Oct.1997 The Internet in Higher Education: Silicon & Fiber replacing Bricks & Mortar, w. B. Oakley, SJSU.
11Apr.1997 Teaching with Style, w. T. Grasha, SJSU.
12-16Aug.1996 Cooperative Learning, w. K. Smith, Michigan State University.
24-25Jan.1995 Cooperative Learning, w. K. Smith, SJSU.
15-18Jun.1993 Instrumentation for Engineering Measurements, w. A. J. Schiff, Stanford University.
22Jul-02Aug.1991 Aircraft Design Education Seminar, w. J. Roskam, University of Kansas.
23-27Apr.1990 Aircraft Conceptual Design, w. D. P. Raymer, UCLA.
6-7Oct.1988 Aerodynamic Analysis & Design, AIAA Professional Study Series, Palo Alto, California.
11-15Jul.1988 Aircraft Design Short Course, w. L. Nicolai, J. Pinson, et al., Bergamo Center, Dayton, Ohio.

III. PROFESSIONAL CAREER

2016-present Chair, Aerospace Engineering Department, San Jose State University, California.
2012-2016 Director, Aerospace Engineering Program, San Jose State University, California.
2010-2011 Aerospace Engineering Associate Chair, Department of Mechanical & Aerospace Engineering, SJSU, California.

1999-2013 Professor, Department of Mechanical & Aerospace Engineering, SJSU.
 2004-2006 Coordinator, Aerospace Engineering Program, SJSU
 1991-1999 Associate Professor, Department of Mechanical & Aerospace Engineering, SJSU.
 1988-1991: Assistant Professor, Department of Aerospace Engineering, SJSU.
 1985-1988: Lecturer, Departments of Mechanical and Aerospace Engineering, SJSU.
 1980-1987 : Research Assistant, Joint Institute for Aeronautics and Acoustics,
 Department of Aeronautics and Astronautics, Stanford University, California.
 1987: Teaching Assistant, Department of Mechanical Engineering, Stanford University, California.

A. Workshops for Faculty

	Date	Workshop Title	Duration	No. of participants	Venue
105	22 Oct. 2019	Preparing Engineers for the 21 st Century: How to Teach Engineering Students Process Skills	8 hrs	3	Aerospace & Mechanical Engineering, SJSU
104	04 Feb. 2019	Preparing Engineers for the 21 st Century: How to Teach Engineering Students Process Skills	6 hrs	3	Aerospace Engineering, SJSU
103	05 Dec. 2017	Engineering student outcomes and assessment: A sustainable, systematic process for continuous improvement	3 hrs	12	IETEC' 17, Hanoi, Vietnam
102	17 Aug. 2017	Preparing Engineers for the 21 st Century: How to Teach Engineering Students Process Skills	6 hrs	4	Aerospace Engineering, SJSU
101	18 May 2017	Preparing Effective Practitioners & Responsible Citizens for the 21 st Century: How to Use Alternative Teaching Methods to Ensure Student Development of Critical Process Skills	1-day	101	Sultan Qaboos University, Muscat, Oman
100	17 May 2017	Critical Thinking Skills for the 21 st Century: How to Define, Assess, and Teach Critical Thinking Skills in Your Discipline	1-day	72	Sultan Qaboos University, Muscat, Oman
99	16 May 2017	Critical Thinking Skills for the 21 st Century: How to Define, Assess, and Teach Critical Thinking Skills in Your Discipline	1-day	63	Sultan Qaboos University, Muscat, Oman
98	19 Aug. 2016	Preparing Engineers for the 21 st Century: How to Teach Engineering Students Process Skills	6 hrs	4	Aerospace Engineering, SJSU
97	10 Aug. 2016	Next Generation Science Standards: Waves – Light & Sound	3 hrs	50	New Haven Unified SD, California Math & Science Partnership / STEM Creates, for science teachers
96	28 Jun. 2016	So, what exactly does it take for Your Students to Learn Something New? Conditions of Learning	1hr:20m	19	Mercantec Faculty Institute, College of Education, SJSU
95	28 Jun. 2016	Engaging Students through Active, Cooperative, and Problem-Based Learning	1hr:20m	19	Mercantec Faculty Institute, College of Education, SJSU
94	26 Jan. 2016	Preparing Engineers for the 21 st Century: How to Teach Engineering Students Process Skills	6 hrs	4	Aerospace Engineering, SJSU

93	02 Nov. 2015	Preparing Engineers for the 21 st Century: How to Teach Engineering Students Process Skills	1.5 hrs	14	3 rd International Engineering Education & Technology Conference (IETEC'15), Sibiu, Romania.
92	26 – 28 May 2015	Preparing Engineers for the 21 st Century: How to Teach Engineering Students Process Skills	3 days	100+	College of Engineering, Sultan Qaboos University, Muscat, Oman
91	04 Dec. 2014	Preparing Engineers for a Globalized Economy: How to Teach Engineering Students Process Skills	3 hrs	26	World Engineering Education Forum (WEEF '14) Dubai, United Arab Emirates
90	03 Nov. 2013	Preparing Students for a Globalized World: How to Teach Engineering Students Process Skills	3 hrs	45	2 nd International Engineering Education & Technology Conference (IETEC'13), Ho Chi Minh City, Vietnam.
89	16 Mar. 2011	A Conversation with Artists Teaching Art	3 hrs	17	Artists Teaching Art Seminar (Art 276), SJSU
88	16 Jan. 2011	Preparing Students for a Globalized World: How to Teach Engineering Students Process Skills	3 hrs	11	1 st International Engineering Education & Technology Conference (IETEC'11), Kuala Lumpur, Malaysia.
87	16 Mar. 2010	1. Course Learning Objectives & Bloom's Taxonomy; 2. Teaching & Learning Styles: The Felder/Silverman model	3 hr	15	Artists Teaching Art Seminar (Art 276), SJSU
86	20 Jan. 2009	Course Learning Objectives & Bloom's Taxonomy	2 hr	12	College of Engineering Qatar University, Doha, Qatar
85	19 Jan. 2009	Program Educational Objectives and Outcomes: How to Design a Sustainable, Systematic Process for Continuous Improvement	2 hr	15	College of Engineering Qatar University, Doha, Qatar
84	04 Jun. 2008	Course Learning Objectives & Bloom's Taxonomy: The Affective Domain	1.5 hr	15	UCSC Extension – Cupertino; SJSU MS Nursing Program
83	09 Apr. 2008	Teaching & Learning Styles: The Kolb Learning Cycle	1.5 hr	1	SJSU Center for Faculty Development & Support
82	08 Apr. 2008	1. Course Learning Objectives & Bloom's Taxonomy 2. Teaching & Learning Styles: The Felder/Silverman model	3 hr	15	Artists Teaching Art Seminar (Art 276), SJSU
81	19 Mar. 2008	Course Design: Blueprint for Success: Engaging Students in the Act of Learning: Implementing Active, Cooperative, and Problem-Based Learning	1.5 hr	3	SJSU Center for Faculty Development & Support
80	05 Mar. 2008	Course Design: Blueprint for Success: What does your Dream Student Look Like? Course Learning Objectives & Bloom's Taxonomy	1.5 hr	6	SJSU Center for Faculty Development & Support
79	27 Feb. 2008	Active Learning – Cooperative Learning – Problem-Based Learning	1 hr	20	College of Business
78	18 Feb. 2008	1. What does it take for Your Students to Learn Something New? Conditions of Learning 2. Course Learning Objectives & Bloom's Taxonomy	2.5 hr	15	Artists Teaching Art Seminar (Art 276)

77	14 Feb. 2008	Course Design: Blueprint for Success: What does it take for Your Students to Learn Something New? Conditions of Learning	1.5 hr	5	SJSU Center for Faculty Development & Support
76	07 Feb. 2008	Scholarly Circle: Getting Started on the Scholarship of Teaching & Learning – Part 2: Methods	2 hr	4	SJSU Center for Faculty Development & Support
75	30 Jan. 2008	Course Design: Blueprint for Success: How to Teach & Assess Design of Experiments	1.5 hr	1	SJSU Center for Faculty Development & Support
74	25 Jan. 2008	Active Learning – Cooperative Learning – Problem-Based Learning	1 hr	40	SJSU Center for Faculty Development & Support; for MUSE Faculty
73	06 Dec. 2007	Scholarly Circle: Getting Started on the Scholarship of Teaching & Learning – Part 2: Methods	2 hr	3	SJSU Center for Faculty Development & Support
72	08 Nov. 2007	Scholarly Circle: Getting Started on the Scholarship of Teaching & Learning – Part 1: Defining Your Research Questions	2 hr	8	SJSU Center for Faculty Development & Support
71	07 Nov. 2007	Scholarly Circle: Getting Started on the Scholarship of Teaching & Learning – Part 1: Defining Your Research Questions	2 hr	8	SJSU Center for Faculty Development & Support
70	01 Nov. 2007	Teaching Students to be Lifelong Learners	1.5-hr	1	SJSU Center for Faculty Development & Support
69	24 Oct. 2007	Active Learning – Cooperative Learning – Problem-Based Learning	1.5-hr	13	UCSC Extension – Cupertino; SJSU MS Nursing Students
68	18 Oct. 2007	Active Learning – Cooperative Learning – Problem-Based Learning	1.5-hr	5	SJSU Center for Faculty Development & Support
67	15 Oct. 2007	Preparing Students for a Globalized World: How to Teach Students Process Skills	1.5-hr	30	School of Nursing (retreat), SJSU
66	10 Oct. 2007	How to Teach and Assess Design of Experiments w. <i>T. Anagnos, C. Komives, K. Mc.Mullin</i>	3-hr	5	IEEE/ASEE Frontiers in Education Conference, Milwaukee, WI
65	26 Sep. 2007	Course Learning Objectives & Bloom's Taxonomy	1.25 hr	20	BSN Associate Degree Program, SJSU
64	19 Sep. 2007	Preparing Students for a Globalized World: How to Teach Engineering Students Process Skills	1.5-hr	1	SJSU Center for Faculty Development & Support
63	13 Sep. 2007	Teaching & Learning Styles: The Felder/Silverman model	1.5-hr	2	SJSU Center for Faculty Development & Support
62	12 Sep. 2007	Teaching & Learning Styles: The Felder/Silverman model	2-hr	14	UCSC Extension – Cupertino; SJSU MS Nursing Program
61	02 Sep. 2007	Preparing Students for a Globalized World: How to Teach Engineering Students Process Skills	3.5-hr	15	International Conference on Engineering Education, Coimbra, Portugal
60	22 Aug. 2007	Course Learning Objectives & Bloom's Taxonomy	1.5-hr	2	SJSU Center for Faculty Development & Support
59	15 Aug. 2007	Course Learning Objectives & Bloom's Taxonomy	1-hr	25	SJSU Center for Faculty Development & Support
58	23 May 2007	Course Learning Objectives & Bloom's Taxonomy	2-hr	18	School of Library & Information Science, SJSU
57	24 Apr.	Teaching & Learning Styles:	2-hr	18	School of Library & Information

	2007	The Felder/Silverman model			Science, SJSU
56	02 Apr. 2007	Assessment Tools: Keep in Mind what ABET is looking for!	2-hr	50	College of Engineering, King Abdul-Aziz University, Jeddah, Saudi Arabia
55	31 Mar. 2007	Engineering Accreditation Process at SJSU	2-hr	50	College of Engineering, King Abdul-Aziz University, Jeddah, Saudi Arabia
54	14 Mar. 2007	Course Design: Blueprint for Success, part 6: How do I Know my Course is Effective? – Diagnostic and Formative Assessment	2-hr	2	SJSU Center for Faculty Development & Support
53	08 Mar. 2007	Course Design: Blueprint for Success, part 5: Lectures, Activities, and Assignments to Address Specific Instructional Objectives	2-hr	1	SJSU Center for Faculty Development & Support
52	29 Feb. 2007	Must one be a Lifelong Learner to be an Educated Person?	1-hr	6	SJSU Center for Faculty Development & Support
51	22 Feb. 2007	Course Design: Blueprint for Success, part 4: Engaging Students in the Act of Learning	2-hr	3	SJSU Center for Faculty Development & Support
50	14 Feb. 2007	Course Design: Blueprint for Success, part 3: The Way We Teach and the Way They Learn: Bridging the Gap	2-hr	2	SJSU Center for Faculty Development & Support
49	08 Feb. 2007	Course Design: Blueprint for Success, part 2: What does your Dream Student Look Like? Course Learning Objectives & Bloom’s Taxonomy	2-hr	4	SJSU Center for Faculty Development & Support
48	31 Jan. 2007	Course Design: Blueprint for Success, part 1: What does it take for Your Students to Learn Something New? Conditions of Learning	2-hr	2	SJSU Center for Faculty Development & Support
47	17–19 Jan. 2007	Course Design: Blueprint for Success	3-Day	10	SJSU Center for Faculty Development & Support
46	29 Nov. 2006	Teaching Students to be Lifelong Learners	1.5-hr	5	SJSU Center for Faculty Development & Support
45	13 Nov. 2006	Program Educational Objectives and Outcomes: How to Design a Sustainable, Systematic Process for Continuous Improvement	1.5-hr	5	SJSU Center for Faculty Development & Support
44	02 Nov. 2006	What does it take for Your Students to Learn Something New? (Conditions of Learning)	1.5-hr	6	SJSU Center for Faculty Development & Support
43	31 Oct. 2006	Course Learning Objectives & Bloom’s Taxonomy	1.5-hr	10	College of Business, SJSU
42	28 Oct. 2006	Program Educational Objectives and Outcomes: How to Design a Sustainable, Systematic Process for Continuous Improvement	3-hr	31	IEEE / ASEE Frontiers in Education Conference, San Diego, CA
41	19 Oct. 2006	How do I Know my Course is Effective? Formative and Summative Assessment for Continuous Course Improvement	1.5 hr	7	SJSU Center for Faculty Development & Support

40	21 Sep. 2006	Course Design to Meet the Specs: Lectures, Activities, and Assignments to Address Specific Instructional Objectives	1.5 hr	6	SJSU Center for Faculty Development & Support
39	13 Sep. 2006	Well-Rounded Teaching for Well-Rounded Learning: The Kolb Learning Cycle	1.5 hr	6	SJSU Center for Faculty Development & Support
38	31 Aug. 2006	The Way They Learn and the Way We Teach: Bridging the Gap	1.5-hr	17	SJSU Center for Faculty Development & Support
37	24 Aug. 2006	Instructional Objectives and Bloom's Taxonomy: Understanding by Design	1.5-hr	6	SJSU Center for Faculty Development & Support
36	18 Aug. 2006	Active Learning – Cooperative Learning – Problem-Based Learning	2-hr	24	SJSU Center for Faculty Development & Support
35	03 May 2006	Energy Transformation w. T. Anagnos, C. Komives, K. Mc.Mullin	2-hr	10	NSF-Sponsored; Synopsis, Sunnyvale, CA; for Science Teachers
34	26 Apr. 2006	Energy Transformation w. T. Anagnos, C. Komives, K. Mc.Mullin	2-hr	10	NSF-Sponsored; Synopsis, Sunnyvale, CA; for Science Teachers
33	22 Mar. 2006	Energy Transformation w. T. Anagnos, C. Komives, K. Mc.Mullin	2-hr	8	NSF-Sponsored; Kennedy Middle School, Redwood City, CA; for Science Teachers
32	15 Mar. 2006	Energy Transformation w. T. Anagnos, C. Komives, K. Mc.Mullin	2-hr	8	NSF-Sponsored; Kennedy Middle School, Redwood City, CA; for Science Teachers
31	23 Aug. 2002	Teaching Engineering in the New Millennium	Full-Day	22	Faculty Instructional Development Program, College of Engineering, SJSU
30	19 Apr. 2002	Teaching & Learning Styles: The Kolb Learning Cycle	2-hr	10	SJSU Center for Faculty Development & Support
29	15 Mar. 2002	Teaching & Learning Styles: The Felder/Silverman model	2-hr	7	SJSU Center for Faculty Development & Support
28	02 Mar. 2002	A Faculty Reward System Promoting the Scholarship of Teaching and Learning	2-hr	12	Lilly Conference on College & University Teaching, Lake Arrowhead, CA , co-presented w. Harper, V., Sprague, J., Nelson, C. Hegstrom, T., Saylor, C.
27	15 Feb. 2002	What does it take for Your Students to Learn Something New? Conditions of Learning	2-hr	7	SJSU Center for Faculty Development & Support
26	26 Oct. 2001	Active Learning – Cooperative Learning – Problem-Based Learning	2-hr	6	SJSU Center for Faculty Development & Support
25	10 Oct. 2001	Active Learning – Cooperative Learning – Problem-Based Learning	3-hr	11	IEEE / ASEE Frontiers in Education Conf., Kansas City, MO
24	14 Sep. 2001	Course Learning Objectives & Bloom's Taxonomy	2-hr		SJSU Center for Faculty Development & Support
23	22 Aug. 2001	Teaching Engineering in the New Millennium	Full-Day	19	Faculty Instructional Development Program, College of Engineering, SJSU
22	27 Apr. 2001	Teaching & Learning Styles: The Kolb Learning Cycle	2-hr	5	SJSU Center for Faculty Development & Support
21	23 Feb.	What does it take for Your Students	2-hr	4	SJSU Center for Faculty

	2001	to Learn Something New? Conditions of Learning			Development & Support
20	22 Jan. 2001	Teaching Design to Freshmen	4-hr	15	Faculty Instructional Development Program, College of Engineering, SJSU; for Engr.10 faculty
19	17 Nov. 2000	Course Learning Objectives & Bloom's Taxonomy	2-hr	6	SJSU Center for Faculty Development & Support
18	27 Oct. 2000	Active Learning – Cooperative Learning – Problem-Based Learning	2-hr	7	SJSU Center for Faculty Development & Support
17	18 Oct. 2000	Active Learning – Cooperative Learning – Problem-Based Learning	3-hr	7	IEEE / ASEE Frontiers in Education Conference, Reno, NV
16	22 Sep. 2000	Teaching & Learning Styles: The Felder/Silverman model	2-hr	6	SJSU Center for Faculty Development & Support
15	23 Aug. 2000	Teaching & Learning Styles: The Felder/Silverman model	2-hr	13	SJSU Center for Faculty Development & Support
14	19 Jan. 2000	1. Teaching & Learning Styles: The Felder/Silverman model 2. Course Learning Objectives & Bloom's Taxonomy & Bloom's Taxonomy	4-hr	16	Faculty Instructional Development Program, College of Engineering, SJSU
13	29 Oct. 1999	What does it take for Your Students to Learn Something New? Conditions of Learning	2-hr	5	SJSU Center for Faculty Development & Support
12	01 Oct. 1999	Teaching & Learning Styles: The Felder/Silverman model	2-hr	19	SJSU Center for Faculty Development & Support
11	23 Aug. 1999	Teaching Skills Workshop	2-hr	9	MPH, Dept. of Health Science, SJSU
10	20 Aug. 1999	Active Learning – Cooperative Learning – Problem-Based Learning	2-hr	11	SJSU Center for Faculty Development & Support
9	27 Apr. 1999	Teaching & Learning Styles: The Felder/Silverman model	2-hr	14	SJSU Center for Faculty Development & Support
8	23 Feb. 1999	What does it take for Your Students to Learn Something New? Conditions of Learning	2-hr	18	SJSU Center for Faculty Development & Support
7	21 Jan. 1999	Introduction to Engineering: A Time for Change	2-hr	4	Faculty Instructional Development Program, College of Engineering, SJSU; for Engr.10 faculty
6	13 Nov. 1998	Teaching & Learning Styles: The Felder/Silverman model	2-hr	7	SJSU Center for Faculty Development & Support
5	16 Oct. 1998	Active Learning – Cooperative Learning – Problem-Based Learning	2-hr	11	SJSU Center for Faculty Development & Support
4	19 Aug. 1998	Active Learning – Cooperative Learning – Problem-Based Learning	2-hr	60	SJSU Center for Faculty Development & Support; New Faculty Orientation
3	07 Mar. 1997	What does it take for Your Students to Learn Something New? Conditions of Learning	1.5 hr	8	Lilly Conference on College & University Teaching, Lake Arrowhead, CA
2	17 May 1996	What does it take for Your Students to Learn Something New? Conditions of Learning	2-hr	12	Faculty Instructional Development Program, College of Engineering, SJSU
1	15 Mar. 1996	Active Learning – Cooperative Learning – Problem-Based Learning	2-hr	18	Faculty Instructional Development Program, College of Engineering, SJSU

B. Courses Developed / Taught

Aerospace Engineering:	AE 10 <i>Introduction to Aerospace Engineering</i> (developed as a new course)
	AE 15 <i>Air & Space Flight: Past, Present and Future</i> (developed as a new course)
	AE 160 <i>Aerodynamics I</i> (developed as a new course)
	AE 162 <i>Aerodynamics II</i> (developed as a new course)
	AE 164 <i>Aerothermodynamics</i>
	AE 167 <i>Aerospace Propulsion</i>
	AE 171 <i>A,B Aircraft Design I and II</i> (developed as new courses)
	AE 262 <i>Advanced Aerodynamics</i> (developed as a new course)
	AE 264 <i>Advanced Compressible Flow</i> (developed as a new course)
	AE 271 <i>Advanced Aircraft Design</i> (developed as a new course)
Educational Leadership:	EdD 512: <i>Leadership, Complexity and Systems Thinking</i> (SJSU Doctoral Program in Educational Leadership)
Mechanical Engineering:	ME 101 <i>Dynamics</i>
	ME 102 <i>Engineering Mechanics</i>
	ME 111 <i>Fluid Mechanics</i>
	ME 112 <i>Fluid Mechanics Laboratory</i>
	ME 223 <i>Gas Dynamics</i>
	ME 297 <i>Special Topics: Fluid Mechanics / Thermodynamics / Heat Transfer</i>
General Education:	AE 96 B <i>From Insects to Jumbo Jets: The Science of Flight</i> (developed as a new course for the SJSU MUSE program)
General Engineering:	ENGR. 10: <i>Introduction to Engineering</i> ENGR/PHYS/MATH 96 A : <i>Problem-Based, Integrated Calculus, Physics and Engineering</i> (Team leader in developing / teaching this 10 unit course)

C. Research AreasC1. Technical

- Analysis of aerospace engineering failures using principles of complexity & systems thinking.
- Aircraft design.
- Low speed & high angle of attack aerodynamics.
- Modeling and control of vortical flows.
- Boundary layers and flow separation.
- Hot gas ingestion in jet-powered, V/STOL aircraft.

C2. Education

- Analysis of education challenges using principles of complexity & systems thinking.
- Exploring connections between art & creativity in engineering design.
- Learning theories: learning styles, taxonomy of educational objectives, conditions of learning.
- Active, cooperative, problem-based, project-based, and service learning.
- Engineering course design and assessment.
- Teaching and assessment of 21st century process skills: problem solving, lifelong learning, engineering design.
- Program assessment.

IV. HONORS & AWARDS

- 2019 Award of Excellence, Distinguished Faculty Mentor for MSAE student Sarah Ortega, who won 1st Place in the 2019 CSU Student Research Competition.
- 2017 Nominated for the SJSU Distinguished Service Award; selected as one of the top three finalists.
- 2014 Nominated for the SJSU Student Organization Advisor of the Year Award by $\Sigma \Gamma T$ (Aerospace Engineering Honor Society) students
- 2008 Honorable Mention – Provost's Outstanding Scholarship of Teaching and Learning Award
- 2008 $\Sigma \Gamma T$ (Aerospace Engineering Honor Society) Professor of the Year Award
Voted by Aerospace Engineering Students
- 2007 $\Sigma \Gamma T$ (Aerospace Engineering Honor Society) Best Professor Award
Voted by Aerospace Engineering Students
- 2007 Provost's Assessment Award
for Commitment to Program Excellence through Student Learning Assessment
as a member of the SJSU College of Engineering Assessment Committee
- 2007 Appointed Associate Member of the Academic Accreditation Unit, College of Engineering, King Abdul Aziz University, Saudi Arabia
- 2006 UICEE Bronze (5th Place) Award for a distinguished contribution in delivering an outstanding paper to the 9th UICEE Annual Conf. on Engineering Education in Muscat, Oman, Feb. 11 – 15
- 2005 UICEE Diamond (Best Paper) Award for a distinguished contribution in delivering an outstanding paper to the 8th UICEE Annual Conf. on Engineering Education in Kingston, Jamaica, Feb. 7 - 11
- 2004 Honorable Mention Award for Research on College Teaching and Learning
from the SJSU Center for Faculty Development
- 2004 UICEE Silver (4th Place) Award for a distinguished contribution in delivering an outstanding paper to the 7th UICEE Annual Conf. on Engineering Education in Mumbai, India, Feb. 9 - 13
- 2003 UNESCO International Centre for Engineering Education Silver Badge of Honour for distinguished contributions to engineering education, outstanding achievements in the globalization of engineering education through the activities of the Centre, and, in particular, for remarkable service to the UICEE
- 2002 College of Engineering McCoy Family Award for Excellence in Faculty Service
- 2001 Faculty-in-Residence for Collaborative Learning, SJSU Center for Faculty Development & Support
- 2000 Outstanding Zone Campus Representative Award, from the American Society for Engineering Education, for outstanding initiative in representing ASEE on the campus and for stimulating interest among faculty
- 2000 Campus Representative Award, from the American Society for Engineering Education, for outstanding achievement in promoting membership in the PSW section
- 1999 Campus Representative Award, from the American Society for Engineering Education, for outstanding achievement in promoting membership in the PSW section
- 1998 Faculty-in-Residence for Innovative Pedagogy, from the Institute for Teaching & Learning.
- 1998 Outstanding Zone Campus Representative Award, from the American Society for Engineering Education, for outstanding initiative in representing ASEE on the campus and for stimulating interest among faculty
- 1998 SJSU Award on Research in Teaching & Learning, from the Institute for Teaching & Learning.
- 1998 &
- 1997 Who's Who Among America's Teachers: The best teachers in America selected by the best students
- 1997 Ralf R. Teetor Educational Award from the Society for Automotive Engineering for outstanding contributions in engineering education
- 1996 Presidential Special Recognition Award, for exceptional achievements in advancing the University's mission
- 1996 College of Engineering Excellence in Teaching Award, SJSU
- 1995 Teacher Scholar, nominated by the School of Engineering and selected by the SJSU Institute for Teaching & Learning
- 1993 Tenure, Department of Aerospace Engineering, SJSU
- 1991 Summer Faculty Fellowship from ASEE to continue research on Hot Gas Ingestion of Jet V/STOL Aircraft, NASA Ames Research Center
- 1990 Summer Faculty Fellowship from ASEE to research Hot Gas Ingestion of Jet V/STOL Aircraft, NASA Ames Research Center

- 1990 Meritorious Performance & Professional Promise Award for outstanding contributions to the academic community at SJSU
- 1980 Research Assistanship from the Joint Institute for Aeronautics & Acoustics, (Dept. of Aeronautics & Astronautics, Stanford University / NASA Ames Research Center) to perform research on High Angle of Attack Aerodynamics
- 1980 Scholarship from the Institute of Governmental Scholarships for ranking 2nd in the senior Mechanical Engineering class, U. of Patras, Greece
- 1979 Scholarship from the Institute of Governmental Scholarships for ranking 4th in the junior Mechanical Engineering class, U. of Patras, Greece
- 1978 Summer Internship from the International Association for the Exchange of Students for Technical Experience at Brneska Strojirna (Steam Boiler and Gas Turbine Design and Manufacturing Co.) in Brno, Czechoslovakia
- 1978 Scholarship from the Institute of Governmental Scholarships for ranking 1st in the sophomore Mechanical Engr. class, U. of Patras, Greece

V. PUBLICATIONS

Journal Articles – Education

12. Mourtos, N.J. (2015, October-December). Preparing engineers for the 21st century: How to teach engineering students process skills. **Invited Paper.** *International Journal for Quality Assurance in Engineering and Technology Education*. Special Issue for IETEC-BRCETE, 4 (4), 1–26.
11. Mourtos, N.J. (2012, January-June). Defining, teaching, and assessing engineering design skills. **Invited Paper.** *International Journal for Quality Assurance in Engineering and Technology Education*. Special Issue, 2 (1), 14–30.
10. Mourtos, N.J. (2010). Challenges students face when solving open-ended problems. *International Journal of Engineering Education*, 26 (4), part 1.
09. Yu, Z. (John), Gee, G., Tabrizi, A., Redd, T., Torres, D., Miller, J., Crossfield, J. & Mourtos, N.J. (2010). Development and implementation of a 3D laser scanning course for land surveying. *Surveying and Land Information Science*, 70 (1), 1–6.
08. Mourtos, N.J. (2006). A sustainable, systematic process for continuous program improvement. **Invited Paper.** *UICEE Global Journal of Engineering Education*, 10 (2), 191–204.
07. Mourtos, N.J. (2006). The scholarship of teaching engineering at San Jose State University; a faculty member's perspective. **Invited Paper.** *UICEE Global Journal of Engineering Education*, 10 (1), 73–84.
06. DeJong-Okamoto, N., Rhee, J. & Mourtos, N.J. (2005). Incorporating the impact of engineering solutions on society into technical engineering courses. **Invited Paper.** *UICEE Global Journal of Engineering Education*, 9 (2), 77–87.
05. Mourtos, N.J., DeJong-Okamoto, N. & Rhee, J. (2004). Open-ended problem solving skills in thermal-fluids engineering. **Invited Paper.** *UICEE Global Journal of Engineering Education*, 8 (2), 189–199.
04. Mourtos, N.J. (2003). From learning to talk to learning engineering: Drawing connections across the disciplines. *UICEE World Transactions on Engineering and Technology Education*, 2 (2), 195–200.
03. Mourtos, N.J. & Allen, E.L. (2001, October). Introducing cooperative learning through a faculty instructional development program. *ASEE Journal of Engineering Education*, 669–675.
02. Mourtos, N.J. (1999, April). Portfolio assessment in aerodynamics. *ASEE Journal of Engineering Education*, 223–229.
01. Mourtos, N.J. (1997, January). The nuts and bolts of cooperative learning in engineering. *ASEE Journal of Engineering Education*, 35–37. **1998 Award on Research in Teaching & Learning from the SJSU Institute for Teaching & Learning.**

Journal Articles – Technical

02. Mourtos, N.J. & Brooks, M. (1996, June). Flow past a flat plate with a vortex / sink combination. *ASME Journal of Applied Mechanics*, 63(2), 543-550, doi:10.1115/1.2788902.

01. Mourtos, N.J. (1990, July). Control of vortical separation on a circular cone. *The Aeronautical Journal*, 94(936), 213-219, doi:10.1017/S0001924000022892. Also, AIAA paper No. 88-0482.

Papers in Conference Proceedings – Education

29. Mourtos, N.J. (2016, June). Reflection as a way to develop engineering process skills. *Proceedings, 1st ATINER Annual International Conference on Engineering Education & Teaching*. Athens, Greece.
28. Mourtos, N.J. (2014, December). Integrating general education outcomes into a senior design capstone Experience. *Proceedings, World Engineering Education Forum*. Dubai, United Arab Emirates.
27. Mourtos, N.J. (2013, November). Service learning in aerodynamics at San José State University. *Proceedings, 2nd International Engineering and Technology Education Conference*. Ho Chi Minh City, Vietnam.
26. Mourtos, N.J. & Woodrow, P. (2012, October). Student-led active learning workshops: Increasing student retention, decreasing time to graduation and providing high-performing students with opportunities to develop coaching skills. *Proceedings, World Engineering Education Forum*. Buenos Aires, Argentina.
25. Mourtos, N.J. (2011, January). Teaching engineering design skills. *Proceedings, 1st International Engineering and Technology Education Conference*. Kuala Lumpur, Malaysia.
24. Mourtos, N.J. (2008, October). Challenges students face in solving open-ended problems. *Proceedings, 7th ASEE Global Colloquium on Engineering Education*. Cape Town, South Africa.
23. Anagnos, T., Komives, C., Mourtos, N.J. & McMullin, K.M. (2007, October). Evaluating student mastery of design of experiment. *Proceedings, 37th IEEE / ASEE Frontiers in Education Conference*. Milwaukee, Wisconsin.
22. Mourtos, N.J. (2007, October). An engineering approach to course design. *Proceedings, 6th ASEE Global Colloquium on Engineering Education*. Istanbul, Turkey.
21. Huet, I., Mourtos, N.J., Costa, N. & Pacheco, O. (2007, September). Models for research-based teaching in engineering courses: A case-study at the University of Aveiro (Portugal) and San José State University (USA). *Proceedings, 10th International Conference on Engineering Education*. Coimbra, Portugal.
20. Mourtos, N.J., Papadopoulos, P. & Agrawal, P. (2006, October). A flexible, problem-based, integrated aerospace engineering curriculum. *Proceedings, 36th ASEE / IEEE Frontiers in Education Conference*. San Diego, California, USA.
19. Mourtos, N.J. (2006, October). Program educational objectives and assessment: A systematic process for continuous improvement. *Proceedings, 5th ASEE Global Colloquium on Engineering Education*. Rio de Janeiro, Brazil.
18. Komives, C., Mourtos, N.J., Anagnos T. & McMullin, K. (2006, July). Enhancing inquiry skills in engineering through a university-school district partnership. *Proceedings, 9th International Conference on Engineering Education*.
17. Mourtos, N.J. (2006, March). A systematic approach for defining and assessing program educational objectives and outcomes. *Proceedings, World Congress on Computer Science, Engineering, and Technology Education*.
16. Mourtos, N.J. (2006, February). Program outcomes and assessment: A sustainable, systematic process for continuous improvement. **Lead Paper. Bronze Award.** *Proceedings, 9th Annual UICEE Conference on Engineering Education*. Muscat, Oman.
15. Du, W.Y., Furman, B.J. & Mourtos, N.J. (2005, February). On the ability to design engineering experiments. *Proceedings, 8th Annual UICEE Conference on Engineering Education*. Kingston, Jamaica.
14. DeJong-Okamoto, N., Rhee, J. & Mourtos, N.J. (2005, February). Educating students to understand the impact of engineering solutions in a global / societal context. **Invited Keynote Address. Diamond Award.** *Proceedings, 8th Annual UICEE Conference on Engineering Education*. Kingston, Jamaica.
13. Mourtos, N.J., DeJong-Okamoto, N., Rhee, J. (2004, February). Defining, teaching and assessing problem solving skills. **Silver Award.** *Proceedings, 7th Annual UICEE Conference on Engineering Education*. Mumbai, India.
12. Mourtos, N.J. (2003, November). Defining, teaching and assessing lifelong learning skills. *Proceedings, 33rd ASEE / IEEE Frontiers in Education Conference*. Boulder, Colorado, USA. **Honorable Mention, 2004 Award for Research on College Teaching and Learning, SJSU Institute for Teaching & Learning.**
11. Mourtos, N.J. & Allen, E.L. (2003, February). Assessing the effectiveness of a faculty instructional development program, part 2: Teaching and learning styles. **Lead Paper,** *Proceedings, 6th Annual UICEE Conference on Engineering Education*. Cairns, Queensland, Australia.

10. Mourtos, N.J. & Furman, B.J. (2002, November). Assessing the effectiveness of an introductory engineering course for freshmen. *Proceedings, 32nd ASEE / IEEE Frontiers in Education Conference*. Boston, Massachusetts.
09. Nelson, C., Kirk, D., McMullin, K., Meyers, S., Mourtos, N.J. & Viajar, P. (2002, June). Technological literacy for K-6 teachers: How things are designed and work. **Invited Paper**, *Proceedings, ASEE Annual Conference*.
08. Mourtos, N.J. & McMullin, K. (2001, February). A comparison of student learning and satisfaction in online and onground engineering courses. *Proceedings, 4th Annual UICEE Conference on Engineering Education*. Bangkok, Thailand.
07. Mourtos, N.J. & Allen, E.L. (2000, July). Assessing the effectiveness of a faculty development program, part 1: Cooperative learning. **Lead Paper**, *Proceedings, Global Congress on Engineering Education*. Wismar, Germany.
06. Mourtos, N.J. (1996, November). A model of learning as it applies to engineering. *Proceedings, ASEE / IEEE Frontiers in Education Conference*. Salt Lake City, Utah, USA.
05. Mourtos, N.J. (1994, November). The nuts and bolts of cooperative learning in engineering. **Honorable Mention, Ben Dasher Award Committee**. *Proceedings, ASEE / IEEE Frontiers in Education Conference*. San Jose, California, USA.
04. Mourtos, N.J. (1994, September). Using cooperative learning in engineering courses. *Proceedings, ASEE Pacific South-West Conference*. Sacramento, California, USA.
03. Desautel, D., Hunter, J., Mourtos, N.J. & Pernicka, H. (1992, July). Development and integration of modern laboratories in aerospace education. *Proceedings, AIAA Aerospace Ground Testing Conference*.
02. Mourtos, N.J. (1990, June). An integrated lecture / laboratory sequence in aerodynamics. *Proceedings, ASEE Annual Conference*. Toronto, Canada.
01. Mourtos, N.J. (1990, June). SJSU development of aircraft design laboratory. *Proceedings, ASEE Annual Conference*. Toronto, Canada.

Papers in Conference Proceedings – Technical

16. Hunter, C. & Mourtos, N.J. (2019, July). Design of a supersonic transport aircraft. *Proceedings, ATINER Annual International Conference on Mechanical Engineering*. Athens, Greece.
15. Johansen, R. & Mourtos, N.J. (2019, July). Dynamic stability and control analysis for an advanced military trainer conceptual aircraft design. *Proceedings, ATINER Annual International Conference on Mechanical Engineering*. Athens, Greece.
14. Gunnam, R.S. & Mourtos, N.J. (2019, May). Design of a regional, hybrid transport aircraft. *Proceedings, International Symposium on Sustainable Aviation (ISSA 2019)*. Budapest, Hungary.
13. Subramanian, S. & Mourtos, N.J. (2019, May). Design of an electric, short takeoff and landing, autonomous, single passenger aerial vehicle. *Proceedings, International Symposium on Sustainable Aviation (ISSA 2019)*. Budapest, Hungary.
12. Rathod, V. & Mourtos, N.J. (2018, October). Design of a four-seat, general aviation, electric aircraft. *Proceedings, International Symposium on Electric Aviation and Autonomous Systems (ISEAS 2018)*. Kyiv, Ukraine.
11. Villanueva, A. & Mourtos, N.J. (2018, July 9-11). Design of a long-range, hydrogen-powered, transport aircraft. *Proceedings, International Symposium on Sustainable Aviation (ISSA 2018)*. Rome, Italy.
10. Ortega, S. & Mourtos, N.J. (2018, July 9-11). Design of short-to-medium range hybrid transport aircraft. *Proceedings, International Symposium on Sustainable Aviation (ISSA 2018)*. Rome, Italy.
09. Montgomery, S. & Mourtos, N.J. (2013, July). Design of a 5-kilogram solar-powered unmanned airplane for perpetual solar endurance flight. *Proceedings, 49th AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit and 11th International Energy Conversion Engineering Conference*. San Jose, California, USA.
08. Rajagopalan, A. S. & Mourtos, N.J. (2012, November). Design of a 4-seat, general aviation, electric aircraft. *Proceedings, More Electric Aircraft Conference*. Bordeaux, France.
07. Alioto, V., Buttita, J., Epps, A., Nguyen, D.B., Yahaghi, A. & Mourtos, N.J. (2009, April). Design of a micro-scale deployable unmanned aerial vehicle. *Proceedings, Aerospace Engineering Systems Workshop, WSEAS*.
06. Johnson, K.T., Sullivan, M.R., Sutton, J.E. & Mourtos, N.J. (2009, April). Design of a skydiving glider. *Proceedings, Aerospace Engineering Systems Workshop, WSEAS*.
05. Kasarapu, K.C., Ahmed, R., Thomas, S.K. & Mourtos, N.J. (2009, April). Design of a combination 310-Passenger / 120-ton cargo aircraft. *Proceedings, Aerospace Engineering Systems Workshop, WSEAS*.

04. Morisetty, P. & Mourtos, N.J. (2009, April). Design of a 100-seat regional aircraft. *Proceedings, Aerospace Engineering Systems Workshop, WSEAS*.
03. Shah, S., Martinez, R., Fernandez, N. & Mourtos, N.J. (2008, August). Double wedge shockwave interaction flow characterization. *Proceedings, Thermal-Fluids Analysis Workshop, TFAWS-08-1033*.
02. Casas, L.E., Hall, J.M., Montgomery, S.A., Patel, H.G., Samra, S.S., Si Tou, J., Quijano, O., Mourtos, N.J. & Papadopoulos, P.P. (2008, August). Preliminary design and CFD analysis of a fire surveillance unmanned aerial vehicle. *Proceedings, Thermal-Fluids Analysis Workshop, TFAWS-08-1034*.
01. Mourtos, N.J. & Roberts, L. (1988, January). Control of vortical separation on a circular cone. *Proceedings, AIAA 26th Aerospace Sciences Meeting, Paper 88-0482*.

Technical Reports

07. Mourtos, N.J., Couillaud, S., Carter, D., Hange, C., Wardwell, D. & Margason, R.J. (1995, January). Flow visualization studies of VTOL models during hover in ground effect. *NASA TM 108860*.
06. Mourtos, N.J. & Margason, R.J. (1991, January). Evaluation of a prediction method for V/STOL aircraft hot-gas ingestion. *NASA TM 103828*.
05. Mourtos, N.J. & Roberts, L. (1987, June). Control of vortical separation on conical bodies. *Ph.D. Thesis, Aeronautics & Astronautics, Stanford University*. Also, *NASA – Stanford Joint Institute for Aeronautics & Acoustics TR 78*.
04. Mourtos, N.J. & Tavella, D.A. (1985, December). The aerodynamics of delta wings of elliptical cross-section with separated flow. *NASA – Stanford Joint Institute for Aeronautics & Acoustics TR 69*.
03. Roberts, L., Lee, D.J. & Mourtos, N.J. (1985, April). Analysis of selected problems involving vortical flows. *NASA CR – 177347*.
02. Mourtos, N.J. (1984, September). Flow past a flat plate with a vortex / sink combination. *NASA – Stanford Joint Institute for Aeronautics & Acoustics TR 58*.
01. Mourtos, N.J. (1980, June). The aerodynamic design of a remotely piloted vehicle. *B.S. Thesis, Mechanical Engineering, University of Patras, Greece*.

VI. CONFERENCE PRESENTATIONS

37. The Boeing 737 Max: A systems approach to analyzing what went wrong. *3rd ATINER Annual International Conference on Mechanical Engineering, Athens, Greece, 23 July 2019*.
36. STEAM education in the 21st century: Are we neglecting the “A”? **(Invited)**. *ATINER 2019 Series of Academic Dialogues: The Future of STEAM (Science, Technology, Engineering, Arts and Mathematics) Education, Athens, Greece, 22 July 2019*.
35. Engineering and science education and research in the 21st Century: Are we dancing to the music? **(Invited)**. *Symposium on the Future Developments and Prospects of Engineering and Science Education & Research in a Global World, ATINER Series of Academic Dialogues, Athens, Greece, 23 July 2018*.
34. Teaching and learning engineering in the 21st century: Are we dancing to the music? **Keynote Address**, *4th International Engineering Education & Technology Conference (IETEC), Hanoi, Vietnam, 5 December 2017*.
33. Teaching and learning engineering in the 21st century: Challenges and opportunities. **(Invited)**. *Round Table Discussion on The Future Developments and Prospects of Engineering and Science Education & Research in a Global World, 1st ATINER Annual International Conference on Mechanical Engineering, Athens, Greece, 18 July 2017*.
32. Peer reviews of teaching effectiveness: Can they be used to steer faculty towards new pedagogies? *World Engineering Education Forum, Seoul, Korea, November 2016*.
31. Reflection as a way to develop engineering process skills, *1st ATINER Annual International Conference on Engineering Education & Teaching, Athens, Greece, June 2016*.
30. Panelist: Teaching to learn; Learning to teach, *4th Annual ASEE Engineering Education Colloquium, Stanford University, California, USA (Invited), April 2015*.
29. Integrating general education outcomes into a senior design capstone experience. *World Engineering Education Forum. Dubai, United Arab Emirates. December 2014*.

28. Service-learning in aerodynamics at San Jose State University. *2nd International Engineering Education & Technology Conference (IETEC)*, **Ho Chi Minh City, Vietnam**, November 2013.
27. Student-led active learning workshops: Increasing student retention, decreasing time to graduation and providing high-performing students with opportunities to develop coaching skills, *World Engineering Education Forum (WEEF)*, **Buenos Aires, Argentina**, October 2012.
26. Teaching engineering design, *1st International Engineering Education & Technology Conference (IETEC) 2011*, **Kuala Lumpur, Malaysia**, January 2011.
25. Challenges students face in solving open-ended problems, *7th ASEE Global Colloquium on Engineering Education*, **Cape Town, South Africa**, October 2008.
24. An engineering approach to course design, *6th ASEE Global Colloquium on Engineering Education*, **Istanbul, Turkey**, October 2007.
23. Models for research-based teaching in engineering courses: A case-study at the University of Aveiro (Portugal) and San José State University (USA), *10th INEER International Conference on Engineering Education*, **Coimbra, Portugal**, September 2007.
22. A flexible, problem-based, integrated aerospace engineering curriculum, *36th ASEE / IEEE Frontiers in Education Conference*, **San Diego, California, USA**, October 2006.
21. Program educational objectives and assessment: A systematic process for continuous improvement, *5th ASEE Global Colloquium on Engineering Education*, **Rio de Janeiro, Brazil**, October 2006.
20. Program outcomes and assessment: A sustainable, systematic process for continuous improvement, *Lead Paper*, *9th Annual UICEE Conference on Engineering Education*, **Muscat, Oman**. Received the *Bronze Award*, February 2006.
19. On the ability to design engineering experiments, *Lead Paper*, *8th Annual UICEE Conference on Engineering Education*, **Kingston, Jamaica**, February 2005.
18. Defining, teaching, and assessing problem solving skills, *Lead Paper*, *7th Annual UICEE Conf. on Engineering Education*, **Mumbai, India**. Received the *Silver Award*, February 2004.
17. Defining, teaching, and assessing lifelong learning skills, *33rd ASEE / IEEE Frontiers in Education Conference*, **Boulder, Colorado**, November 2003.
16. Assessing the effectiveness of a faculty instructional development program, part 2: Teaching and learning styles, *Lead Paper*, *6th Annual UICEE Conference on Engineering Education*, **Cairns, Queensland, Australia**, February 2003.
15. Assessing the effectiveness of an introductory engineering course for freshmen, *32nd ASEE / IEEE Frontiers in Education Conference*, **Boston, Massachusetts**, November 2002.
14. A comparison of student learning and satisfaction in online and onground engineering courses, *2nd Annual SJSU Conference on the Scholarship of Teaching & Learning*, **San Jose, California**, April 2001.
13. A comparison of student learning and satisfaction in online and onground engineering courses, *4th Annual UICEE Conference on Engineering Education*, **Bangkok, Thailand**, February 2001.
12. Using learning styles preferences data to inform classroom teaching and assessment activities, *IEEE / ASEE Frontiers in Education Conference*, **Kansas City, Missouri**, October 2000.
11. Assessing the effectiveness of a faculty development program, part 1: Cooperative learning, *Lead Paper*, *2nd Global Congress on Engineering Education*, **Wismar, Germany**, July 2000.
10. Assessing the effectiveness of a faculty development program, *IEEE / ASEE Frontiers in Education Conference*, **San Juan, Puerto Rico**, November 1999.
09. Portfolio assessment in aerodynamics, *IEEE / ASEE Frontiers in Education Conference*, **Pittsburgh, Pennsylvania**, November 1997.
08. Problem-based, integrated calculus, physics, and engineering, *ASEE Annual Conference*, **Milwaukee, Wisconsin**, June 1997.
07. A model of learning as it applies to engineering, *IEEE / ASEE Frontiers in Education Conference*, **Salt Lake City, Utah**, November 1996.
06. Promoting self-reflection through portfolio-type activities in a cross-disciplinary setting, *Lilly Conference on College & University Teaching*, **Lake Arrowhead, California** (co-presented), March 1996.
05. The nuts and bolts of cooperative learning in engineering, *Honorable Mention*, Ben Dasher Award Committee, *IEEE / ASEE Frontiers in Education Conference*, **San Jose, California**, November 1994.
04. Using cooperative learning in engineering courses, *ASEE Pacific South-West Conference*, **Sacramento, California**, October 1994.
03. An integrated lecture / laboratory sequence in aerodynamics, *ASEE Annual Conference*, **Toronto, Canada**, June 1990.

02. SJSU development of aircraft design laboratory, *ASEE Annual Conference, Toronto, Canada*, June 1990.
01. Control of vortical separation on a circular cone. *AIAA 26th Aerospace Sciences Meeting, Reno, Nevada*, January 1988.

VII. OTHER INVITED TALKS

General

- 0.1 Face to face: Experiences with Different Cultures, Global Student Network, San Jose State University, **California, USA**, 14 October 2014.

Education

- 0.5 Course Learning Objectives & Their Taxonomy: Understanding by Design, College of Engineering, Qatar University, **Doha, Qatar**, 20 January 2009.
- 0.4 Program Educational Objectives and Outcomes: How to Design a Sustainable, Systematic Process for Continuous Improvement, College of Engineering, Qatar University, **Doha, Qatar**, 19 January 2009.
- 0.3 Preparing Engineers for the 21st Century, College of Engineering, Qatar University, **Doha, Qatar**, 18 January 2009.
02. Assessment Tools – Keep in Mind What ABET is Looking For, College of Engineering, King Abdul Aziz University, **Saudi Arabia**, 02 April 2007.
01. Accreditation Process At San Jose State University, College of Engineering, King Abdul Aziz University, **Saudi Arabia**, 31 March 2007.

Technical

06. From Bumble Bees To Jumbo Jets: The Science of Flight, 3rd Annual Alumni College, **San Jose State University, California, USA**, 14 October 2006.
05. A Journey Through The History of Flight, Centennial of Flight Celebrations, **San Jose State University, California, USA**, 02 December 2003.
04. From Daedalus to the Orient Express: A Brief History of Aviation, **Democritos Professional Society, California, USA**, 17 May 1991.
03. Evaluation of a Prediction Method for V / STOL Aircraft Hot Gas Ingestion, **NASA Ames Research Center, California, USA**, 09 August 1990.
02. Control of Vortical Separation on Conical Bodies, Fixed Wing Aerodynamics Branch, **NASA Ames Research Center, California, USA**, 30 June 1988.
01. Control of Vortical Separation on Conical Bodies, Colloquium Series, Aerospace & Mechanical Engineering, **University of Notre Dame, Indiana**, 20 January 1988.

VIII. GRANTS

2018–2020	\$ 65 K, Jacobs Inc./NASA Ames RC, <i>Digitize Unitary Plan Wind Tunnel Drawings</i> .
2018	\$ 17 K, NASA MUREP/SEAP Aeronautics Scholarship Program to support an AE student.
2017	\$ 27 K, NASA MUREP/SEAP Aeronautics Scholarship Program to support an AE student.
2016	\$ 27 K, NASA MUREP/SEAP Aeronautics Scholarship Program to support an AE student.
2015	\$ 27 K, NASA MUREP/SEAP Aeronautics Scholarship Program to support an AE student.
2015	\$ 8.2 K, NASA MUREP/SEAP Aeronautics Scholarship Program to support an AE student.
2014	\$ 7.5 K, NASA Aeronautics Scholarship Program to support an AE student.
2010	\$ 10 K, Google, <i>Dead Downwind Faster Than The Wind</i> .
1998	\$ 45 K, IITL Knight-Ridder Champions Fellowships, <i>Explore/Create Multimedia in Engineering Education</i> (PI).

- 1997–1998 \$ 41 K, ITL Learning Productivity Grant, *Problem-Based, Integrated Interdisciplinary Course-Sequence in Math, Physics, and Engineering* (PI).
- 1995 \$ 11K, NASA Ames Research Center, *An Experimental Investigation of the Effects of Turbulence on Microphone Forebodies* (cont'd).
- 1994 \$ 33 K, NASA Ames Research Center, *An Experimental Investigation of the Effects of Turbulence on Microphone Forebodies*.
- 1993 \$ 2.5 K, Graduate Student Stipend Program, *Automobile Aerodynamics*.
- 1993 \$ 7.2 K, ESL, *Ice Detection on Airplane Wings During Takeoff*.
- 1992 \$ 23 K, NASA Ames Research Center, *An Experimental Study of Spanwise Blowing on Delta Wings*.
- 1992 \$ 5 K, Lockheed Missiles & Space Co., *Modeling of an Attitude Control System*.
- 1991 \$ 19 K, NASA Ames Research Center, *An Improved Prediction Method for Jet-Powered V/STOL Aircraft Hot Gas Ingestion*.
- 1990 \$ 4 K, College of Engineering, SJSU, summer research.

IX. EDITOR

- Athens Journal of Technology & Engineering (2018)

X. REVIEWER

- Journal of Aerospace Technology & Management (2017)
- Athens Journal of Education (2017)
- Athens Journal of Technology & Engineering (2017)
- Compare: A Journal of Comparative and International Education (September 2016)
- World Engineering Education Forum (WEEF 2016),
- 19th International Conference on Interactive Collaborative Learning (ICL 2016)
- 3rd International Engineering Education & Technology Conference (IETEC 2015)
- Journal of Aerospace Engineering (2014)
- World Engineering Education Forum (WEEF 2014),
- 2nd International Engineering Education & Technology Conference (IETEC 2013)
- International Journal for Quality Assurance in Engineering & Technology Education (2011)
- IGI, Chapter for Book: *Work-Integrated Learning in Engineering and Technology: New Approaches and Practices* (2010)
- WIETE World Transaction on Engineering & Technology Education (2010)
- International Journal of Engineering Education (2005, 2011)
- UICEE Annual Conference on Engineering Education (2000 – 2007)
- UICEE Global Journal on Engineering Education (2004 - 2007)
- UICEE World Transactions on Engineering & Technology (2002 – 2007)
- ASEE Journal of Engineering Education (1996 – 1999)
- ASME Journal of Applied Mechanics (1997)
- International Journal of Mechanical Engineering Education (1991)
- McGraw-Hill Publishing Co. (2 books: 1997, 2004)
- Thomson Engineering (2 books: 2004)
- John Wiley & Sons (1 book: 2004)
- Monash University, Melbourne, Australia (M.S. thesis: 2003)
- School of Mechanical and Production Engineering,
 - Nanyang Technological University, Singapore (Ph.D. thesis: 1998)
- University of Kuwait (new course proposal: 2004).

XI. M.S. THESES / PROJECTS SUPERVISED

- 79.2019 Design of a skytaxi. *Samneet Singh*.
- 78.2019 Design of a hybrid, general aviation aircraft. *Zibin He*.

- 77.2019 Design of a regional, hybrid, transport aircraft. *Rupa Sindhu Gunnam*. **2019 Outstanding Research Award in Aeronautics**.
- 76.2019 Design of an electric, short takeoff and landing, autonomous, single passenger aerial vehicle. *Shalinidarsana Subramanian*. **2019 Outstanding Research Award in Aeronautics**
- 75.2019 Design of an advanced military trainer. *Royd Johansen*. **2019 Outstanding Research Award in Aeronautics**
- 74.2018 Design of a supersonic business jet. *Harshil Patel*.
- 73.2018 Design of a transonic business jet. *Dharmendra Khatri*.
- 72.2018 Design of a future air force close air support aircraft. *Oscar Ho*.
- 71.2018 Design of a business jet. *Nicholas Dea*.
- 70.2018 Design and development of a multi-mission unmanned aerial system through modular component integration and additive manufacturing. *Kim Lau*.
- 69.2018 Design of a medium size, blended wing-body subsonic transport aircraft. *Nishant Patel*.
- 68.2018 Design of a four-seat, general aviation, electric aircraft. *Viralkumar Rathod*.
- 67.2018 Design of a short-to-medium range hybrid transport aircraft. *Sarah Ortega*. College of Engineering **Research Scholar Award. 1st Place, 2019 CSU Student Research Competition**.
- 66.2017 Design of a next generation military, heavy-lift air transport. *Brian Andrade*.
- 65.2017 Design of a long range, hydrogen-powered, transport aircraft. *Alyssa Villanueva*.
- 64.2017 Design of a narrow body, medium range, jet transport aircraft. *Veera Venkatesh Vadaparathi*.
- 63.2017 Helicopter: the design of a two-passenger, general aviation, VTOL, electric aircraft. *Hilal Annous*.
- 62.2017 Empirical prediction of a Clark Y-14 airfoil low-speed lift and drag increments due to high-lift devices, *Graciela Manzanares Sousa*. College of Engineering **Research Scholar Award**.
- 61.2017 Design of an all-electric general aviation airplane, using plausible future battery technology. *Nathaniel Grady*. College of Engineering **Research Scholar Award**.
- 60.2016 Conceptual design of a fixed-wing crop dusting unmanned aerial vehicle. *Kevin Young*.
- 59.2016 Design of a long-range, hydrogen-powered transport aircraft. *Matthew Smith*.
- 58.2015 A redesign of the Yves Rossy wingsuit for ground takeoff capability. *Andres Herrera*.
- 57.2015 Low cost educational vertical air launch system. *Alireza Forouzandeh Tabrizi*.
- 56.2015 Design of attitude determination software for a star tracker. *Adriana Fukuzato*.
- 55.2015 Numerical analysis and optimization of wing-tip designs. *Uram Kim*.
- 54.2015 Analysis and testing of gelled, high propulsive green propellant for small satellites in low earth orbit. *Stephen Lai*.
- 53.2015 Advanced airship design. *Istiaq Mahmud*.
- 52.2015 Liquid oxygen / liquid methane pressure-fed rocket engine. *Andrew Masterman*.
- 51.2015 Design and analysis of an in-flight braking system. *Ashish Raichur*.
- 50.2015 Wing sail vs. traditional sail performance comparison. *Harrison Turner*.
- 49.2014 Design of a Red Bull Flugtag aircraft. *Jennifer Sutton & Martin Sullivan*. **2014 Outstanding Research Award in Aeronautics**
- 48.2014 Aerodynamic forces and heat transfer on a sphere and a cone in hypersonic flow. *Josue Lopez*.
- 47.2014 Airfoil boundary layer separation prediction. *Kartavya Patel*.
- 46.2014 Design of a long-range supersonic transport. *Seruvizhi Maharajan*.
- 45.2014 Design of a high-speed subsonic wind tunnel. *Jordan Towles-Moore*.
- 44.2013 Pressure distribution on a swept wing in subsonic flow. *Anshul Amin*.
- 43.2013 Numerical analysis of bird strike damage on composite sandwich structure using Abaqus/Explicit. *Rahulkumar Mav*.
- 42.2013 Ultra portable and rapidly deployable rotorcraft platform for tactical compact communications relay. *Ben Nikaido*.
- 41.2013 Aero-Assist: A guide tool to aid in the generation of surface grids for CFD. *Omar Quijano*.
- 40.2013 Design of a 5-kg solar-powered unamanned airplane for perpetual solar endurance flight. *Sean Montgomery*. **2013 Outstanding Research Award in Aeronautics**
- 39.2013 Video-guided, autonomous pollinator rotorcraft. *Tung X. Dao*. **2013 Outstanding Research Award in Aeronautics**
- 38.2012 Design of a 4-seat general aviation aircraft. *Arvin Rajagopalan*.
- 37.2012 CFD modeling and analysis of an arc-jet facility using ANSYS Fluent. *Srikrishna Srinivasa*.
- 36.2012 High subsonic lifting fuselage transport. *Nicholas Nemirsky*.
- 35.2012 Solar-powered UAV: High-altitude, long endurance (HALE) applications. *Manish Bhatt*.

- 34.2012 Miniturization, integration, flight testing, and performance analysis of a scalable, autonomous, GPS-guided parafoil system for targeted payload return. *Joshua Benton*. **2012 Outstanding Research Award in Aeronautics**
- 33.2011 Airworthiness analysis of a modified KR-2 experimental aircraft. *Boris Bravo*. Presented at the 2012 AIAA Region VI Student Conference.
- 32.2011 Design of a new stratotanker. *I-Chiang Wu*.
- 31.2011 Design of a small, solar-powered UAV. *Chris Hartney*. **1st Place, Masters Division, 2011 AIAA Region VI Student Conference**
- 30.2011 HALE solar - powered aerial communicator. *Yaser Najafi*.
- 29.2011 VASIMR rocket design for a mission to Mars. *Mitesh Patel*.
- 28.2011 Design of a hoverwing aircraft. *Nita Shah*.
- 27.2011 Subsonic wind tunnel wall corrections on a wing with a Clark Y-14 airfoil. *Tommy Blackwell*.
- 26.2010 Propeller design for a "Downwind, faster than the wind" vehicle. *Shethal Thomas Kodyattu*.
- 25.2010 CFD wing optimization for a 310-passenger / 120-ton cargo aircraft. *Kapil Chaitanya*.
- 24.2010 Design of a 50-seat commuter aircraft. *Rahail Ahmed*.
- 23.2009 Design of an advanced VTOL dropship. *Dwayne E. Hickman Jr.*
- 22.2009 Fly-by-wire flight control system for jet transport aircraft, *Deeptanshu Arnold*.
- 21.2009 Design of a 100-seat regional aircraft. *Praveen Kumar Morisetty*.
- 20.2007 Feasibility study of the effectiveness of high-lift devices on a blended wing body transport. *Mark Demann*. **3rd Place, Masters Division, 2007 AIAA Region VI Student Conference**
- 19.2007 Design of a medium range blended wing body transport. *Dave Matson*. **1st Place, Masters Division, 2007 AIAA Region VI Student Conference**
- 18.2007 Conceptual design of a small hypersonic transport. *John Candeias*.
- 17.2006 Design of an annular wing. *Ben Affleck*.
- 16.2006 Verification of airworthiness of modified KR-2 aircraft. *Michael Nordin*.
- 15.2006 Formation flying of jet transports. *Woon-Ho Cho*.
- 14.2006 Mechanical integration, testing and delivery of the large area telescope (LAT) for the GLAST program. *Eliazar Ortiz*.
- 13.2005 The design of a hybrid airplane. *Jim Colosimo*.
- 12.2005 The design of a small, unmanned aerial vehicle. *Jeremy Scheerer*.
- 11.2004 A user-friendly, interactive program for subsonic jet engine compressor analysis and design. *Sajesh Giri*.
- 10.2003 Three-dimensional image registration. *Miki Sode*.
- 9.2003 Numerical techniques used in modeling species concentrations & evaporation rates in a multi-component, evaporating droplet. *Robert Shearer*.
- 8.2003 Thermochemical analysis of hydrogen peroxide with applications to rocket design. *Robert A. Robles*.
- 7.1997 An experimental study of the response of a microphone mounted in a flat plate. *Hedayat U. Hamid*.
- 6.1997 Computational investigation of the aerodynamic characteristics of delta wings with various leading-edge shapes. *Akbar Sultan*.
- 5.1997 An automatic data acquisition system for the SJSU subsonic wind tunnel. *Spiros Agellopoulos*.
- 4.1997 An experimental & computational investigation of the separated flow over a flat plate with a vortex/sink combination. *Marcus Brooks*.
- 3.1996 Computational investigation of the low-speed S1223 airfoil with and without a gurney flap. *Edward Tejnil*.
- 2.1996 Pressure distribution on the underside of a flat-bottom race car. *Alan Dezzani*.
- 1.1994 Experimental investigation of spanwise blowing on a 40-degree swept trapezoidal wing. *Stephane Couillaud*.

XII. SERVICE

Service to the Professional Community

- 2018 – present Member, Hellenic Quality Assurance & Accreditation Agency
18 – 24 November 2018: Member, accreditation panel for the Athens School of Fine Arts
- 2018 – present Member, Advisor Board, eVinh (electric flying car) <https://evinh.com>

- 2016 – present Member, Management Committee, Asia Pacific Alliance for Quality Assurance in Higher Education < <http://apaqa.org>>
- 2014 – 2018 Faculty Mentor, *Preparing Future Professors*, Stanford University
- Mentored Ph.D. students who intend to pursue academic careers
- 2011 – 2018 International Journal for Quality Assurance in Engineering & Technology Education, Associate Editor, appointed in 2016; Member, Editorial Board since 2011.
- 2010 – 2014 Member, Editorial Advisory Board, Global Journal for Engineering Education.
- 1989 – 1996 Democritos Professional Society
- President, 1993 – 1996
- Vice President, 1991 – 1993
- Board Member, 1989 – 1991

Service to San Jose State University

- 2009 – present ***Ed.D. Leadership Program faculty member***
- 2016-2017 SJSU Associate Dean for Graduate Studies Recruitment Committee
- 2011-2014 University Library Board
- 2011-2013 University Assessment Committee:
- 2009-2010 Chair, Student Evaluation Review Board (SERB)
- 2009-2010 Director of Doctoral Program in Educational Leadership Search Committee
- 2008-2011 Advisory Committee, College of Science STEM NSF Grant
- 2007-2008 Committee for the Review of the AVP for Academic Technology
- 2006-2008 ***Assistant Director, Center for Faculty Development & Support.***
Support individual faculty, departments, and colleges through workshops and individual consultations in the areas of course design and assessment, effective teaching and innovative pedagogy, program assessment and continuous improvement, with the goal of developing state-of-the-art courses and curricula that prepare our diverse student body for the challenges of the 21st century.
- 2002-2003 Mentor, “Peer-Partners in Teaching” Program, Center for Faculty Development & Support.
- 1998-2002 Faculty-in-Residence for Innovative Pedagogy, Center for Faculty Development & Support.
Offered workshops on Cooperative Learning and Learning Styles ; mentored SJSU faculty on teaching-related issues.
- 1995-1996
- 1987-1988 Volunteer Faculty Mentor.

Service to the College of Engineering

- College Representative for the ***California Faculty Association (CFA)***
- Biomedical Engr. Dept. Faculty Recruitment Committee, AY 2018–2019
- Biomedical Engr. Dept. Retention, Tenure & Promotion Committee, AY 2018–2020 (Chair, AY2019–2020)
- Industrial & Systems Engr. Dept. Retention, Tenure & Promotion Committee, AY 2018–2019
- International Engineering Graduate Student Advisor Recruitment Committee, AY 2016–2017
- Chair, Carolyn Guidry Professor of Engineering Education Recruiting Committee, AY 2013–2014
- Member, College of Engineering Strategic Planning Committee, AY 2013–2014
- Assessment Committee, 2011–2015
- ***Faculty Instructional Development Coordinator***, 1996–2002.
Organized “Conversations on Teaching” (workshops, seminars, informal discussions) on teaching, learning and assessment in engineering; mentored engineering faculty.
- ***Coordinator, Introduction to Engineering Course for Freshmen***, 1997–2002.
Responsible for content delivery and course assessment, training new instructors, semi-annual freshman design competition.
- ***Campus Representative, American Society for Engineering Education***, 1996–2002.
- Co-organizer, 1995 ASEE / PSW Conference in San Jose.

*Service to the Department of
Aerospace Engineering (1987–1996, 2013–present)
Mechanical & Aerospace Engineering (1996 – 2013)*

- 2006 – 2020 ***BSAE / MSAE Assessment Coordinator***
Design assessment process for program educational objectives and student outcomes, collect and analyze data, prepare self study reports for the University, ABET, WASC.
- 2004 – present Chair, AE Faculty Search Committee
- 1995 – 2018 Faculty Advisor, ΣΓΤ (Aerospace Honor Society) Student Chapter
- 2010 – 2011 MAE Department Chair Search Committee
- 2009 – 2012 MAE Undergraduate Studies Committee; Chair, 2010–2012
- 1990 – 1998 Faculty Advisor for the AIAA Student Chapter
1994: Organized Student Conference at SJSU for the PSW Region.
1991: Organized Short Course in V/STOL Aircraft Design at SJSU with experts from NASA Ames Research Center.
- 2004-2006 ***AE Program Coordinator, SJSU***
Plan and develop course and program goals, coordinate curriculum and laboratory development, form and maintain the AE Advisory Board and serve as ad hoc member on this Board, develop AE class schedule, identify, supervise, and evaluate part-time AE faculty, provide orientation and registration assistance to AE students, advise, counsel and guide undergraduate and graduate AE students on personal, academic and professional development, organize outreach activities to promote the AE Program, provide graduate and undergraduate student advising, respond to public inquiries regarding the AE Program.
- 2002-2006 ***Program Assessment Coordinator, Mechanical & Aerospace Engineering, SJSU.***
Designed an assessment process for program educational objectives, program outcomes, and program criteria, led department faculty in the implementation of this process, collected and analyzed data, prepared the self study reports for the BSAE and BSME programs, and presented the results to ABET evaluators during a successful accreditation visit (Fall 2005).

XIII. CONSULTING

- 2018-2019 External evaluator for “SaTC-EDU Collaborative: Enhancing security education through transiting research on security in emerging network technologies”, NSF-sponsored project at SJSU, California.
- 2016-2017 Leadership Team, California Mathematics & Science Partnership (CaMSP) Grant, Cohort 13- New Haven Unified SD. Provide professional development in inquiry-based instruction to teachers during summer intensives and release days.
- 2015 College of Engineering, Sultan Qaboos University, **Muscat, Oman**: visited departments and delivered a 3-day workshop on course design, assessment, and teaching methods to college faculty and administrators.
- 2010 Collaborative Concepts: Development of instructional materials for fluid mechanics
- 2007-2010 External evaluator for “Incorporating 3-D Laser Scanning into Land Surveying Curricula”, NSF-sponsored project at Evergreen College, California.
- 2006-2014 College of Engineering, King Abdul Aziz University, **Jeddah, Saudi Arabia**: ABET EC2000 preparation – Associate Member, Academic Accreditation Unit <<http://engg.kau.edu.sa/AAU/>>
- 2003-2008 “Partnership for Student Success in Science”, an NSF-sponsored project to improve K-12 Science Education (collaboration among nine schools districts, SJSU, Synopsys, and Agilent Technologies), California.
- 2003-2006 External evaluator for “A Model Curriculum for Civil Engineering Technology”, NSF-sponsored project at Evergreen College, California.
- 1996 Expert witness, Collins Schlothauer Attorneys at Law, case involving a gas leak.
- 1992 Wind tunnel testing of golf ball barrier netting for Roxford Fordell.
- 1991 Wind tunnel testing of arrows for Liston & Associates.

XIV. INDUSTRIAL EXPERIENCE

1991, 03Jun-16Aug	ASEE Summer Faculty Fellow, STOVL / Powered-Lift Technology Branch, NASA Ames RC.
1990, 08Jun-17Aug	ASEE Summer Faculty Fellow, Fixed Wing Aerodynamics Branch, NASA Ames RC.
1978, 01Jul-31Aug	Design Engineer, Steam Boiler and Gas Turbine Design, Brneska Strojirna Co., Brno, Czechoslovakia.
1977, 01Jul-31Aug	Assembly Engineer, Kritikos Textile Manufacturing Co., Patras, Greece.
1976, 15Jun-15Sep	Powerline Engineer, Scounakis Shipyard, Salamis, Greece.

XV. SOCIETY AFFILIATION

- Hellenic Quality Assurance & Accreditation Agency (HQA) < <https://www.adip.gr/en/index.php>>
- Athens Institute for Education & Research (ATINER) <<https://www.atiner.gr>>:
 - **Head:** *Mechanical Engineering Research Unit* (2016 – present)
 - **Academic Member:** *Education Research Unit* (2016 – 2017)
- Management Committee, Asia Pacific Alliance for Quality Assurance in Higher Education (APAQA) < <http://apaqa.org>> (2016-present)
- World Institute for Engineering & Technology Education (2009 – 2014)
- Professional & Organizational Development Network in Higher Education (2006 – 2010)
- UICEE: UNESCO International Center for Engineering Education (2000 – 2008)
- ASEE: American Society for Engineering Education (1988 – present)
- AIAA: American Institute for Aeronautics and Astronautics (1980 – present)
 - Aerospace Department Chair Association
- Demokritos Society of America Think Tank
 - Board Member (1997 – 2006)
- Democritus Professional Society (1987 – 1996)
 - Board Member (1988 – 1990)
 - Vice President (1990 – 1992)
 - President (1992 – 1996)
- Greek Technical Chamber

XVI. OTHER

- ➔ ***Cross-Cultural Solutions Volunteer Abroad Program***
 - Served as teacher in Magereza Nursery School, Moshi, Tanzania, 16–30 June 2012
- ➔ Traveling – 71 countries, 6 continents
- ➔ Argentine tango
 - Participated in 6 performance teams, including competition teams in the 2015, 2018 and 2019 USA Tango Championships
- ➔ Kayaking
 - Kayaked 80 km in the islands of the San Blas Archipelago in a team of kayaks led by Kuna guides, Panama (2012)
- ➔ Running
 - *Olympic Torch Bearer:*
 - Lappas, Greece (1972 Munich Olympics)
 - Corfu, Greece (2004 Athens Olympics)
 - 2003 *All-American Master* in 3000 m steeplechase
 - 538 races including:
 - 6 ultra-marathons – longest: 67 km Swiss Alpine Marathon Davos (1989) 7hr:47min:25s
 - 11 marathons – fastest: 2hr:55:15 (1986) San Francisco

- 240 track races; *best masters times*: 200 m @ 25.8; 400 m @ 55.2; 800 m @ 2:06.63; 1500 m @ 4:26.39
 - 142 road races; *best times*: 5 km @ 16:50; 10 km @ 34:33; 10 mi @ 59min:16sec; half-marathon @ 1hr:22min:05s
 - 139 x/c races, all distances
- ➔ Mountain Climbing
- Kilimanjaro, **Tanzania**: 5,895 m (4 July 2012)
 - Mt. Whitney, California, **USA**: 4,421 m (15 October 2005)
 - Mt. Shasta, California, **USA**: 4,322 m (17 June 2019)
 - Jbel Toubkal, **Morocco**: 4,167 m (3 April 2010)
 - Triglav, **Slovenia**: 2,864 m (24 June 2008)
 - Blue Mountain, **Jamaica**: 2,256 m (23 February 2005)
- ➔ Flying – Private Pilot, 270 hrs in Cessnas 152 and 172