

**KENNY G. MARTIN**  
SENIOR INSTRUCTOR II  
STRUCTURAL ENGINEERING

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School of Civil & Construction Engineering (CCE)  
Oregon State University  
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### **EDUCATION**

M.S., Civil/Structural Engineering, Oregon State University, 2010  
M.S., Wood Science, Oregon State University, 2010  
B.S., Mechanical Engineering (with honors), Texas A&M University, 1999

### **ACADEMIC EXPERIENCE**

**Senior Instructor** School of CCE, Oregon State University, 2016-present  
**Instructor** School of CCE, Oregon State University, 2011-2016

- Teach undergraduate and graduate courses in a variety of topics
  - Lower division courses related to structural mechanics and engineering orientation
  - Upper division courses in wood design, formwork for concrete, retaining walls, and senior design projects
- Multiple learning environments including high-enrollment in-person courses, online Ecampus classes, honors college, and international programs (INTO)
- Mentoring of undergrad and graduate students
- Service on committees related to curriculum development, online education, and position searches
- Outreach and volunteer activities with local area high schools and hands-on engineering demonstrations
- Areas of interest include: engineering fundamentals, structural design and analysis, design of wood structures, timber mechanics, behavior and properties of wood

### **Awards**

- 2020 Online Teaching Award, College of Engineering, Oregon State University
- 2020 Teaching Excellence and Resilience Award, School of Civil and Construction Engineering
- 2017 Teaching Excellence Award, School of Civil and Construction Engineering
- 2013 Teacher of the Year, ASCE Student Chapter, Oregon State University
- 2012 Teacher of the Year, ASCE Student Chapter, Oregon State University
- Diversity and Inclusion Spotlight, 2019
- ASCE Civil Engineering Magazine article, "Oregon State University instructor brings statics to life," 2021.

### **Service, Outreach, and Volunteer Efforts**

- Chair, CCE Undergraduate Curriculum Committee – 2016 to 2017
- Member, CCE Undergraduate Curriculum Committee – 2012 to 2022
- Member, CCE First Year Mentor Program– 2018 to 2022

## Service, Outreach, and Volunteer Efforts (continued)

- Faculty Advisor, ASCE Timber Bridge Project – 2012 to 2020
- Member, CEM Instructor Search Committee – 2023. Resulted in the hire of three new instructors within the CEM group: (1) Construction Engineering Management, (2) Engineering Management, and (3) Heavy Civil.
- Initiated the development of a three-part Engineering Mechanics series for the Educational Opportunities Program (EOP) which provides support for students who have traditionally been denied equal access to higher education. This effort represented the first ever collaboration between the College of Engineering (COE) and the EOP.
- Ad-hoc member of the Faculty Status Committee (COE-FSC) which reviewed and prepared letters for 32 cases for promotion and/or tenure, 2022-2023
- Chair, ad-hoc subcommittee for the evaluation of Tracy Arras for promotion to Senior Instructor II, 2022
- External reviewer, Adam Lambert, P&T for promotion to rank of Senior Instructor I, 2022
- Ecampus online program leader: Engineering Mechanics Microcredential, 2021 to present.
- Faculty Status Committee – ad hoc reviewer for Senior Instructor P&T cases – 2018
- Faculty mentor, CCE Cohort program for first-year students – 2018 to present
- Volunteer, Jacobs/OSU Annual High School Model Bridge Regional Competition – 2016 to present
- Conduct review session for the Fundamentals of Engineering (FE) Exam – 2018 to 2021
- Faculty Advisor, Faculty-Student Mentor Program (FSMP) serving underrepresented students – 2019-2020
- Search committee member, Instructor position, Nuclear Science and Engineering (NSE) – 2019-2020
- Search committee member, Geotechnical Engineering Instructor position, Civil and Construction Engineering (CCE) – 2021
- Guest lecturer, “Conflict Resolution,” Senior Capstone Course, CE 418 Professional Practice – 2019 to present
- Faculty Advisor, Project X (STEM outreach) – 2016 to 2018
- 10-week continuing education workshop, 2020. Developed and delivered modules for a workshop oriented towards industry professionals, attended by engineers and architects from across the country. Facilitated through the TallWood Design Institute and eligible for 9 AIA CEU’s. “Wood Science 101 for Designers”
- Guest lecture, CCE 101 Engineering Orientation, 2012 and 2013
- “Celebrity Interview with Faculty,” CCE Graduate Seminar, 2020
- “Dunk your professor” - COE fundraiser, dunk-tank participant, 2012-2014. Engineering carnival event to gather donations for the Linn-Benton Food Bank
- Invite a faculty member to dinner, McNary Dining Hall (2014) and Wilson Hall (2014)

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## **TEACHING EXPERIENCE (SUMMARY)**

|              |            |   |                   |
|--------------|------------|---|-------------------|
| 2017-2019    | ENGR 111   | Introduction to Engineering             | Freshman          |
| 2011-Present | ENGR 211   | Statics                                 | Sophomore         |
| 2014-Present | ENGR 211   | Statics ( <i>Ecampus version</i> )      | Sophomore         |
| 2018-2019    | CE 418/419 | Civil Eng. Professional Practice        | Senior            |
| 2012-Present | CE 427/527 | Temporary Structures                    | Senior / Graduate |
| 2023-Present | CE 427/527 | Temporary Structures ( <i>Ecampus</i> ) | Senior / Graduate |
| 2012-Present | CE 484/584 | Wood Design                             | Senior / Graduate |

## **GRADUATE STUDENT COMMITTEES**

### **Master of Science (M.S.)**

- Hunter Andersen (2019), dual major Civil Engineering / Wood Science
- Justin Holman (2019), dual major Civil Engineering / Wood Science
- Daniel Way (2015), Wood Science
- Andrew Hanek (2014), Civil Engineering
- Anthonie Kramer (2014), dual major Civil Engineering / Wood Science
- Kenton Alldritt (2013), dual major Civil Engineering / Wood Science
- Brian Malone (2013), dual major Civil Engineering / Wood Science
- Quadri Owokoniran (2012), Civil Engineering
- Toby Polocoser (2012), dual major Civil Engineering / Wood Science
- Kate Pfretzschnner (2012) dual major Civil Engineering / Wood Science

### **Master of Engineering (M.Eng.)**

- Luke Loecher (2021), Civil Engineering
- Tian Yiyi (2021), Civil Engineering
- Mckenzie Foster (2021), Civil Engineering
- Maysaloon Abugrain (2021), Civil Engineering
- McKenzie Foster (2021), Civil Engineering
- Cole Boileau (2020), Civil Engineering
- Kelsang Nima (2020), Civil Engineering
- Yiqun Hui (2019), Civil Engineering
- Logan King (2019), Civil Engineering
- Kyle Kadamoto (2019), Civil Engineering

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## **GRADUATE STUDENT COMMITTEES (CONTINUED)**

### **M.Eng, continued**

- Cihang Fu (2019), Civil Engineering
- Derek Jakelka (2018), Civil Engineering
- Alicia Wong (2017), Civil Engineering
- Suraj Sidhu (2017), Civil Engineering
- Phillip Raschkow (2016), Civil Engineering
- Barry Maslen (2016), Civil Engineering
- Sarah Van Otterloo (2016), Civil Engineering
- Andrew Fortner (2015), Civil Engineering
- Alexandra Stroud (2014), Civil Engineering
- Jarrett Yanagida (2014), Civil Engineering
- Michael Koiv (2014), Civil Engineering
- Sohalia Starks (2014), Civil Engineering
- Andrew Potts (2013), Civil Engineering
- Austin Maue (2013), Civil Engineering
- Ben Schlachter (2013), Civil Engineering
- Christopher Kemp (2013), Civil Engineering
- Daniel Reedy (2013), Civil Engineering
- Austin Basl (2012), Civil Engineering / Mechanical Engineering
- Brandon Maupin (2012), Civil Engineering
- Zhou Yuxiang (2012), Civil Engineering
- Patrick Goodman (2012), Civil Engineering
- Robert Kruse (2012), Civil Engineering
- Taharka Vue (2012), Civil Engineering
- Trevor Oppezzo (2012), Civil Engineering

## **UNDERGRADUATE STUDENT COMMITTEES**

### **Undergraduate Honors Thesis**

- Hayley Girod (2017), Civil Engineering
- Jordan Henderson (2013), Civil Engineering
- Hana D'Acci (2012), Civil Engineering

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## TEACHING EXPERIENCE (DETAILED)

| Year | Term | Course | Title | No. of Students |      |       | Student Rating<br>1=Very Poor, 6=Excellent |                           |               |
|------|------|--------|-------|-----------------|------|-------|--|---------------------------|---------------|
|      |      |        |       | Undergrad       | Grad | Total | Class as a Whole                           | Instructor's Contribution | Response Rate |

### Statics (On-Campus, except during COVID)

|      |                    |          |                     |     |   |     |       |       |       |
|------|--------------------|----------|---------------------|-----|---|-----|-------|-------|-------|
| 2011 | Fall               | ENGR 211 | Statics             | 407 | - | 407 | 5.2   | 5.5   | 87%   |
| 2012 | Spring             | ENGR 211 | Statics             | 222 | - | 222 | 5.0   | 5.3   | 56%   |
| 2012 | Summer             | ENGR 211 | Statics             | 57  | - | 57  | 5.3   | 5.4   | 42%   |
| 2012 | Fall               | ENGR 211 | Statics             | 410 | - | 410 | 5.4   | 5.6   | 68%   |
| 2013 | Winter             | ENGR 211 | Statics             | 221 | - | 221 | 5.1   | 5.2   | 39%   |
| 2013 | Spring             | ENGR 211 | Statics             | 222 | - | 222 | 5.1   | 5.4   | 57%   |
| 2013 | Summer             | ENGR 211 | Statics             | 40  | - | 40  | 5.7   | 5.8   | 58%   |
| 2013 | Fall               | ENGR 211 | Statics             | 426 | - | 426 | 5.4   | 5.6   | 67%   |
| 2014 | Winter             | ENGR 211 | Statics             | 208 | - | 208 | 5.5   | 5.5   | 65%   |
| 2014 | Spring             | ENGR 211 | Statics             | 222 | - | 222 | 5.1   | 5.4   | 70%   |
| 2014 | Summer             | ENGR 211 | Statics             | 32  | - | 32  | 5.4   | 5.7   | 75%   |
| 2014 | Fall               | ENGR 211 | Statics             | 418 | - | 418 | 5.6   | 5.8   | 65%   |
| 2015 | Spring             | ENGR 211 | Statics             | 226 | - | 226 | 5.6   | 5.7   | 67%   |
| 2015 | Fall               | ENGR 211 | Statics             | 430 | - | 430 | 5.6   | 5.8   | 70%   |
| 2016 | Winter             | ENGR 211 | Statics             | 211 | - | 211 | 5.6   | 5.8   | 60%   |
| 2016 | Spring             | ENGR 211 | Statics             | 220 | - | 220 | 5.6   | 5.8   | 58%   |
| 2016 | Fall               | ENGR 211 | Statics             | 399 | - | 399 | 5.6   | 5.8   | 65%   |
| 2017 | Winter             | ENGR 211 | Statics             | 223 | - | 223 | 5.7   | 5.8   | 57%   |
| 2017 | Spring             | ENGR 211 | Statics             | 220 | - | 220 | 5.5   | 5.7   | 57%   |
| 2017 | Fall               | ENGR 211 | Statics             | 414 | - | 414 | 5.8   | 5.9   | 68%   |
| 2018 | Fall               | ENGR 211 | Statics             | 393 | - | 393 | 5.6   | 5.8   | 36%   |
| 2019 | Fall               | ENGR 211 | Statics             | 383 | - | 383 | 5.5   | 5.8   | 31%   |
| 2020 | Winter             | ENGR 211 | Statics             | 168 | - | 168 | 5.4   | 5.7   | 31%   |
| 2020 | Spring<br>(Remote) | ENGR 211 | Statics<br>(Remote) | 179 | - | 179 | COVID | COVID | COVID |
| 2020 | Fall<br>(Remote)   | ENGR 211 | Statics<br>(Remote) | 197 | - | 197 | 4.6   | 5.4   | 29%   |
| 2021 | Fall               | ENGR 211 | Statics             | 330 | - | 330 | 5.7   | 5.9   | 18%   |
| 2022 | Fall               | ENGR 211 | Statics             | 280 | - | 280 | 5.4   | 5.8   | 21%   |
| 2023 | Summer             | ENGR 211 | Statics             | 12  | - | 12  | 6.0   | 6.0   | 8%    |
|      |                    |          |                     |     |   |     |       |       |       |
|      |                    |          |                     |     |   |     |       |       |       |

6763      5.4      5.7  
Total      Average      Average

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**DETAILED TEACHING EXPERIENCE (CONTINUED)**

| Year | Term | Course | Title | No. of Students |      |       | Student Rating<br>1=Very Poor, 6=Excellent |                           |               |
|------|------|--------|-------|-----------------|------|-------|--|---------------------------|---------------|
|      |      |        |       | Undergrad       | Grad | Total | Class as a Whole                           | Instructor's Contribution | Response Rate |

**Statics (Ecampus)**

|      |        |          |           |    |   |    |       |       |       |
|------|--------|----------|-----------|----|---|----|-------|-------|-------|
| 2014 | Fall   | ENGR 211 | e-Statics | 25 | - | 25 | 5.2   | 5.5   | 72%   |
| 2015 | Winter | ENGR 211 | e-Statics | 48 | - | 48 | 4.5   | 4.4   | 57%   |
| 2015 | Spring | ENGR 211 | e-Statics | 46 | - | 46 | 4.1   | 5.0   | 41%   |
| 2015 | Fall   | ENGR 211 | e-Statics | 15 | - | 15 | 5.7   | 5.9   | 33%   |
| 2016 | Winter | ENGR 211 | e-Statics | 30 | - | 30 | 4.1   | 4.1   | 53%   |
| 2016 | Spring | ENGR 211 | e-Statics | 44 | - | 44 | 4.6   | 4.6   | 47%   |
| 2016 | Fall   | ENGR 211 | e-Statics | 14 | - | 14 | 5.0   | 5.7   | 55%   |
| 2017 | Winter | ENGR 211 | e-Statics | 27 | - | 27 | 5.1   | 5.6   | 59%   |
| 2017 | Spring | ENGR 211 | e-Statics | 31 | - | 31 | 4.4   | 5.3   | 48%   |
| 2017 | Fall   | ENGR 211 | e-Statics | 28 | - | 28 | 4.4   | 5.4   | 71%   |
| 2018 | Winter | ENGR 211 | e-Statics | 23 | - | 23 | 3.3   | 3.8   | 22%   |
| 2018 | Spring | ENGR 211 | e-Statics | 25 | - | 25 | 5.6   | 5.5   | 52%   |
| 2018 | Fall   | ENGR 211 | e-Statics | 22 | - | 22 | 5.5   | 5.9   | 27%   |
| 2019 | Winter | ENGR 211 | e-Statics | 26 | - | 26 | 4.0   | 4.0   | 35%   |
| 2019 | Spring | ENGR 211 | e-Statics | 32 | - | 32 | 4.4   | 5.0   | 25%   |
| 2019 | Fall   | ENGR 211 | e-Statics | 33 | - | 33 | 5.9   | 5.9   | 21%   |
| 2020 | Winter | ENGR 211 | e-Statics | 37 | - | 37 | 5.6   | 5.4   | 32%   |
| 2020 | Spring | ENGR 211 | e-Statics | 47 | - | 47 | COVID | COVID | COVID |
| 2020 | Fall   | ENGR 211 | e-Statics | 37 | - | 37 | 5.5   | 5.7   | 43%   |
| 2021 | Winter | ENGR 211 | e-Statics | 16 | - | 16 | 5.0   | 5.5   | 31%   |
| 2021 | Spring | ENGR 211 | e-Statics | 19 | - | 19 | 5.3   | 5.6   | 30%   |
| 2021 | Fall   | ENGR 211 | e-Statics | 49 | - | 49 | 5.6   | 5.0   | 14%   |
| 2022 | Winter | ENGR 211 | e-Statics | 56 | - | 56 | 5.0   | 5.3   | 16%   |
| 2022 | Spring | ENGR 211 | e-Statics | 36 | - | 36 | 5.7   | 5.3   | 13%   |
| 2022 | Fall   | ENGR 211 | e-Statics | 31 | - | 31 | 4.7   | 5.3   | 38%   |
| 2023 | Winter | ENGR 211 | e-Statics | 42 | - | 42 | 5.5   | 5.8   | 16%   |
| 2023 | Spring | ENGR 211 | e-Statics | 26 | - | 26 | 5.8   | 5.8   | 19%   |
| 2023 | Fall   | ENGR 211 | e-Statics |    |   |    |       |       |       |
| 2024 | Winter | ENGR 211 | e-Statics |    |   |    |       |       |       |
| 2024 | Spring | ENGR 211 | e-Statics |    |   |    |       |       |       |

865  
Total      5.0  
Average      5.2  
Average

**Statics (Honors)**

|      |                  |          |                |    |   |    |     |     |     |
|------|------------------|----------|----------------|----|---|----|-----|-----|-----|
| 2020 | Fall<br>(Remote) | ENGR 211 | Honors Statics | 15 | - | 15 | 5.0 | 5.2 | 27% |
|------|------------------|----------|----------------|----|---|----|-----|-----|-----|

15  
Total      5.0  
Average      5.2  
Average

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**DETAILED TEACHING EXPERIENCE (CONTINUED)**

| Year | Term | Course | Title | No. of Students |      |       | Student Rating<br>1=Very Poor, 6=Excellent |                           |               |
|------|------|--------|-------|-----------------|------|-------|--|---------------------------|---------------|
|      |      |        |       | Undergrad       | Grad | Total | Class as a Whole                           | Instructor's Contribution | Response Rate |

**Wood Design**

|      |                    |            |             |    |    |    |     |     |     |
|------|--------------------|------------|-------------|----|----|----|-----|-----|-----|
| 2012 | Winter             | CE 580     | Wood Design | 27 | 25 | 52 | 5.8 | 5.8 | 96% |
| 2013 | Winter             | CE 484/584 | Wood Design | 23 | 12 | 35 | 5.2 | 5.6 | 51% |
| 2014 | Winter             | CE 484/584 | Wood Design | 24 | 12 | 36 | 5.5 | 5.7 | 66% |
| 2015 | Winter             | CE 484/584 | Wood Design | 24 | 8  | 32 | 5.6 | 5.8 | 78% |
| 2016 | Winter             | CE 484/584 | Wood Design | 22 | 4  | 26 | 5.6 | 5.9 | 69% |
| 2017 | Winter             | CE 484/584 | Wood Design | 27 | 9  | 36 | 5.6 | 5.6 | 70% |
| 2018 | Winter             | CE 484/584 | Wood Design | 25 | 9  | 34 | 5.6 | 5.8 | 56% |
| 2019 | Winter             | CE 484/584 | Wood Design | 14 | 14 | 28 | 5.5 | 5.7 | 50% |
| 2020 | Winter             | CE 484/584 | Wood Design | 34 | 15 | 49 | 5.8 | 5.7 | 43% |
| 2021 | Winter<br>(Remote) | CE 484/584 | Wood Design | 24 | 10 | 34 | 5.9 | 5.9 | 16% |
| 2022 | Winter             | CE 484/584 | Wood Design | 57 | 9  | 66 | 4.5 | 4.8 | 33% |
| 2023 | Winter             | CE 484/584 | Wood Design | 31 | 13 | 44 | 5.8 | 5.9 | 20% |
| 2024 | Winter             | CE 484/584 | Wood Design |    |    |    |     |     |     |
| 2025 | Winter             | CE 484/584 | Wood Design |    |    |    |     |     |     |

472      5.5      5.7  
Total      Average      Average

**Temporary Construction Structures (on-campus, except during COVID)**

|      |                    |            |                              |    |    |    |       |       |       |
|------|--------------------|------------|------------------------------|----|----|----|-------|-------|-------|
| 2012 | Spring             | CE 427/527 | Temp. Structures             | 54 | 16 | 70 | 5.8   | 5.8   | 73%   |
| 2013 | Spring             | CE 427/527 | Temp. Structures             | 30 | 13 | 43 | 5.2   | 5.5   | 62%   |
| 2014 | Spring             | CE 427/527 | Temp. Structures             | 39 | 5  | 44 | 5.0   | 5.5   | 68%   |
| 2015 | Spring             | CE 427/527 | Temp. Structures             | 45 | 4  | 49 | 5.6   | 5.8   | 69%   |
| 2015 | Spring             | CE 427/527 | Temp. Structures             | 45 | 4  | 49 | 5.6   | 5.8   | 69%   |
| 2016 | Spring             | CE 427/527 | Temp. Structures             | 48 | 4  | 52 | 5.3   | 5.7   | 61%   |
| 2017 | Spring             | CE 427/527 | Temp. Structures             | 32 | 3  | 35 | 5.7   | 5.9   | 51%   |
| 2018 | Spring             | CE 427/527 | Temp. Structures             | 59 | 11 | 70 | 5.7   | 5.8   | 27%   |
| 2019 | Spring             | CE 427/527 | Temp. Structures             | 60 | 10 | 70 | 5.7   | 5.9   | 32%   |
| 2020 | Spring<br>(Remote) | CE 427/527 | Temp. Structures<br>(Remote) | 40 | 5  | 45 | COVID | COVID | COVID |
| 2021 | Spring<br>(Remote) | CE 427/527 | Temp. Structures<br>(Remote) | 44 | 9  | 53 | 5.8   | 5.8   | 30%   |
| 2022 | Spring             | CE 427/527 | Temp. Structures             | 30 | 5  | 35 | 4.5   | 5.5   | 17%   |

615      5.5      5.7  
Total      Average      Average

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## **OTHER ACADEMIC POSITIONS**

**Graduate Research Assistant**      Dept. of Wood Science & Engineering, Oregon State University  
2007-2010

- Member of research team with emphasis in *Timber Engineering and Structural Design*
- Developed curriculum for Advanced Timber Design (WSE 560)
- Developed curriculum for the Wood Education Institute, offering online curriculum to 15 institutions throughout the country as well as to practicing structural engineers
- Member of a three-person research team that helped design and successfully test laminated wood wine racks to resist seismic forces (for use in the retail industry)
  - Project garnered national media recognition

## **AWARDS & HONORS PRIOR TO JOINING FACULTY AT OSU**

- 2010 recipient of the Distinguished Master's Thesis Award, Oregon State University
  - MS thesis nominated as one of the top five theses for 2010-2011 among the western conference of graduate schools (90 institutions, 15 states, 3 Canadian provinces)
  - 2008-09 recipient of the Saubert Graduate Fellowship
  - 2007-08 recipient of the Mary McDonald Fellowship
  - 1996-97 recipient of the Phillips Petroleum Mechanical Engineering Scholarship
- 

## **PROFESSIONAL EXPERIENCE**

**Structural Engineer**      Benson Woodworking Company, Walpole, NH, 2010-2011

- Designed heavy timber structures using traditional joinery as well as modern construction practices
- Performed structural analyses to size members and specify connections
- Incorporated sustainable building practices into design, developed new strategies as required
- Served as direct point-of-contact with clients, builders, contractors, and architects
- Designed residential mechanical systems (heating, cooling, ventilation, etc.)
- Performed heat loss calculations and return-on-investment analyses
- Evaluated energy performance of existing homes and new construction
- Researched and developed innovative building components, enclosure systems, and material selections

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## **PROFESSIONAL EXPERIENCE, CONTINUED**

### **Consultant**

McGee Engineering, Corvallis, OR, 2007-2009

- Performed general calculations in support of bridge and formwork design
- Conducted assessment of Trail River Bridge located in the Chugach National Forest, Alaska
  - 140 ft., two-span bridge with four glued-laminated girders, constructed 1963
  - Interpreted resistance drilling data from girders
  - Assessed the quality of the tension laminations in each girder
  - Coordinated activities and analysis with bridge inspection team, US Forest Service, USDA, American Institute of Timber Construction (AITC), and the Forest Products Laboratory (FPL)
  - Defended final assessment report to the US Forest Service and additional interested parties listed above

### **Stress & Design Engineer**

Jet Aviation Engineering Services, San Antonio, TX, 2006-2007

- Designed custom assemblies and mounting systems involved with the modification of VIP aircraft interiors – business and private jets
- Determined forces and stresses in aircraft structures resulting from applied and induced loads (emergency flight maneuvers, gust loads, etc.)
- Compared induced stresses to material properties and fastener allowables to determine safety of designs and predict structural failure
- Prepared official stress reports for FAA certification
- Checked the stress reports and design drawings of other engineers
- Served as the only member in the team to work in both roles as a design engineer and a stress engineer
- Used SolidWorks and AutoCAD to design individual parts as well as complex mechanical systems
- Served as the technical interface with external organizations

### **Blast Effects Engineer**

Baker Engineering and Risk Consultants, San Antonio, TX, 2000-2004

- Oversaw operation of BakerRisk's shock tube test facility, including testing personnel, equipment, scheduling, and maintenance
- Designed and fabricated fixtures, test frames, and test specimens
- Performed blast load testing on structural and architectural elements (columns, beams, doors, windows, and walls)
- Studied fragment generation and fragment throw after blast events
- Conducted large-scale vapor cloud explosions to study flammability of gas mixtures
- Investigated fitting failures and response of equipment to internal explosion (nail guns, hydraulic fittings, pressure vessels, etc.)
- Participated in multiple accident investigations and gathered forensic data after catastrophic industrial explosions

## **PUBLICATIONS**

### ***Refereed Journal Publications***

- Martin, K., Gupta, R., Prevatt, D., Datin, P., van de Lindt, J., “Modeling System Effects and Structural Load Paths in a Wood-Framed Structure,” *Journal of Architectural Engineering*, Vol. 17, No. 4, 2011, pp. 134-143.