Floraliza Bornasal

The Hal and Inge Marcus School of Engineering | Saint Martin's University, 5000 Abbey Way, Lacey, WA 98503|

Phone: 360-688-2754 | email: <u>fbornasal@stmartin.edu</u> | website: <u>https://fbbornasal.com/</u> |

https://orcid.org/0000-0003-3951-2321

EDUCATION

Oregon State University, Corvallis, OR

Doctor of Philosophy - Civil Engineering, June 2015
 Dissertation: "Knowing concepts in the social and material context of engineering practice"

• Master of Science - Civil Engineering, June 2012

Thesis: "Transportation network connectivity, facilities encouraging walkability, and crime"

Saint Martin's University, Lacey, WA

• Bachelor of Science - Civil Engineering, May 2009

Areas of Concentration: Transportation

Honors: Cum Laude

TEACHING EXPERIENCE

Saint Martin's University, Lacey, WA, Associate Professor, Civil Engineering, August 2021 – Present

- GE 103 Graphics, Computer-Aided Drafting, and Soild Modelling
- GE 204 Statics
- GE 205 Dynamics
- GE 207 Materials Laboratory
- CE 323 Transportation Engineering
- CE 324 Transportation Engineering Lab
- CE 490 Internship
- CE 498 Senior Design I
- CE 499 Senior Design II
- CE 425/MCE525 Advanced Transportation Engineering
- CE 465/MCE565 Traffic Capacity Analysis
- MCE502 Advanced Design Projects

Saint Martin's University, Lacey, WA, Assistant Professor, Civil Engineering, August 2015 – August 2021

- GE 103 Graphics, Computer-Aided Drafting and Solid Modelling
- GE 204 Statics
- GE 205 Dynamics
- GE 207 Materials Laboratory
- CE 323 Transportation Engineering
- CE 324 Transportation Engineering Lab
- CE 498 Senior Design I
- CE 499 Senior Design II
- CE 425/MCE525 Advanced Transportation Engineering
- CE 435/MCE535 Pavement Design
- CE 465/MCE565 Traffic Capacity Analysis
- CE 495 (Special Topics) Transportation Planning Applications

Curriculum vitae for Floraliza B. Bornasal, Ph.D.

- MCE502 Advanced Design Projects
- MCE501 (Special Topics) Transportation Facility Design
- MCE612/MEM612 Project Management-A Holistic Approach
- MEM595 (Special Topics) Lunar Geology and Resources

Oregon State University, Corvallis, OR, Courtesy Faculty, 2019 – 2024

 Served as Courtesy Faculty Appointment to serve as on Graduate and Doctoral Candidate Committees

Oregon State University, Corvallis, OR, Teaching Assistant, Winter 2015 and Fall 2013

- CE418 Capstone Design, Winter Quarter 2015
- ENGR111 Engineering Orientation, Fall Quarter 2013

Washington State University, Pullman, WA, Teaching Assistant, Fall 2012, Spring 2013

(not assigned to specific courses)

Washington State University, Pullman, WA, Individual Tutor, January 2013 - May 2013

• EDRES565 Quantitative Research

Saint Martin's University, Lacey, WA, Engineering Tutor for Learning and Writing Center, Fall 2008

- PHY171 Introductory Physics I
- GE204 Statics, GE206 Mechanics of Materials
- CE308 Fluid Mechanics, CE350 Structural Analysis

UNIVERSITY SERVICE ACTIVITIES (at Saint Martin's University)

Hal and Inge Marcus School of Engineering

- Interim Associate Dean of HIMSE, Fall 2024 Present
- Civil Engineering Department Chair, Fall 2023 Spring 2026

Faculty (Self) Governance, University Level

- Faculty Senate, School of Engineering Representative, Fall 2021 Spring 2023
 - o Faculty Compensation Task Force, Senate Representative, Fall 2022 Spring 2023
- Faculty Senate, School of Engineering Representative, Fall 2016 Spring 2017
 - Senate Ad-Hoc Committee, Tenure, Advancement, and Promotion (TAP), Member, Spring
 2017 Fall 2018

University Committees

- University Advancement Committee, Fall 2022 Spring 2025
 - o School of Engineering Representative, Fall 2022 Spring 2025
 - o Chair, Fall 2023 Spring 2024
 - o Chair, Fall 2024 Spring 2025
- Academic Standards Committee,
 - o School of Engineering Representative, Fall 2016 Spring 2019
 - o Chair, Fall 2018 Spring 2019
- University Core Curriculum Committee,

- o School of Engineering Representative, Fall 2017 Spring 2020
- Retention Committee
 - o School of Engineering Representative, Fall 2020 Spring 2022
- Financial Aid Committee
 - o At-Large Faculty Member, Fall 2021 Spring 2023

Other Service

- Program Advising
 - o Benedictine Scholars Program, Faculty Advisor, Fall 2017 Spring 2023
 - Boys and Girls Club Science Exploration Series, Faculty Representative for School of Engineering, Fall 2015 – Fall 2022
- Student Organization Advising
 - o KaPUSO (formerly, Filipino Heritage Club), Faculty Advisor, Fall 2016 Present
 - o Pacific Islander Club, Faculty Advisor, Fall 2018 Present
 - o Society of Women Engineers, Faculty Advisor, Fall 2015 Spring 2024
- Faculty and Staff Search Committees
 - o Provost Search Committee, Spring 2025
 - Academic Advisor Search Committee, Summer 2023
 - Mechanical Engineering Faculty Search Committee, Spring 2022
 - o Dean of Admissions and Enrollment Search Committee, Fall 2020 Spring 2021
 - o Mathematics Faculty Search Committee, Member, Fall 2019-Spring 2020
 - o Mathematics Faculty Search Committee, Member, Fall 2018 Spring 2019
 - Criminal Justice Faculty Search Committee, Member, Fall 2017- Spring 2018
 - o Mathematics Faculty Search Committee, Member, Fall 2017 Spring 2018
 - o Civil Engineering Faculty Search Committee, Member, Fall 2017 Spring 2018
 - o Physics Faculty Search Committee, Member, December 2016 February 2017
- Temporary Committees and Other University Service
 - o Strategic Plan Annual Improvement Projects, Distinctive Degrees Team, Member, 2023
 - o Title III Faculty Committee on Career Competencies, Summer 2022
 - Engineering Advisory Board, Revision of Evaluation Criteria and Rubric, November 2019 April 2020
 - o COVID-19 Academic Schedule/Scheduling Team, Member, Summer 2020
 - o International Education Week Committee, Member, November 2017
 - Benedictine Scholars Program Review Task Force, Member, February 2017 May 2017
 - o Benedictine Scholars Selection Committee, Member, 2017, 2018, 2019, 2020, 2021, 2022
 - o Benedictine Scholars Day, Evaluator, 2016, 2017, 2018, 2020, 2021, 2023
 - o Scholars Day, Sponsoring Faculty, 2017 2023
 - o Arbor Vitae Committee, Member, Fall 2015 Present

RESEARCH EXPERIENCE

Oregon State University, Corvallis, OR

- Post-Doctoral Researcher, Summer 2015
 Mentored graduate students and developed research design/plans with graduate students.
- Graduate Research Assistant/Primary Field Researcher, June 2014 December 2014

<u>Title:</u> "CAREER: Characterization of Cognitive Models of Conceptual Understanding in Practicing Civil Engineers and Development of Situated Curricular Materials" (Award No. 1055356)

• Graduate Research Assistant, October 2012 – February 2014

PUBLICATIONS

REFEREED JOURNAL ARTICLES

Gestson, S.L., S.A. Brown, A. Ahmed, D. Hurwitz, **F.B. Bornasal**, & R. Desing. (2024). Exploring the differences in hydraulic engineering problem-solving behavior of undergraduate students and engineering practitioners with multiple representations using eye tracking techniques. *Journal of Civil Engineering Education*, 150(1). DOI: 10.1061/JCEECD.EIENG-1872.

Brown, S.A. & **F.B. Bornasal**. (2023). Learning theories applied to teaching and improving hydrogeological conceptualization. *Groundwater*, 61(6). https://doi.org/10.1111/gwat.13360

Barner, M.S., S.A. Brown, **F.B. Bornasal**, & D. Linton. (2021). Tangibility of representations in engineering courses and the workplace. *Journal of Engineering Education*, 111(1). DOI: 10.1002/jee.20439.

Bornasal, **F.B.**, S.A. Brown, N. Perova-Mello, & K. Beddoes. (2018). Conceptual Growth in Engineering Practice. *Journal of Engineering Education*, 107(2). DOI:10.1002/jee.20196.

Brown, S.A, **F.B. Bornasal**, S. Brooks, and J.P. Martin. (2014). Civil engineering faculty incorporation of sustainability in courses and relation to sustainability beliefs. *ASCE Journal of Professional Issues in Engineering Education and Practice*, 141(2). 10.1061/(ASCE)EI.1943-5541.0000225, C4014005.

CONFERENCE PUBLICATIONS REFEREED BY FULL PAPER

Slaboch, P.E., **F.B. Bornasal,** & R. Picone. (2016). A pilot study of a novel set of three courses for teaching electrical system analysis to mechanical engineering students. 123rd ASEE Annual Conference & Exposition, New Orleans, LA. Presented by Bornasal.

Bornasal, F.B. & S.A. Brown. (2015). Engineering concepts in engineering performances and social interactions. 6th Research in Engineering Education Symposium, Dublin, Ireland. Presented by Bornasal.

Urlacher, M., S.A. Brown, P. Steif, & **F.B. Bornasal**. (2015). Practicing civil engineers' understanding of Statics Concept Inventory Questions. 122nd ASEE Annual Conference & Exposition, Seattle, WA. Presented by Urlacher.

Wallace, L.S., **F.B. Bornasal**, and S.A. Brown. (2015). Concepts in roundabout resources: An understanding of practical and academic resources. 122nd ASEE Annual Conference and Exposition, Seattle, WA. Presented by Wallace and Bornasal.

Bornasal, F.B., J.N. Lester, & S.A. Brown. (2014). Recollecting experience in interviews: the structure and organization of engineering 'interview talk.' 121st ASEE Annual Conference and Exposition, Indianapolis, IN. Presented by Bornasal.

Curriculum vitae for Floraliza B. Bornasal, Ph.D.

Bornasal, F.B. & S.A. Brown. (2014). Prevalence of inscriptions in transportation engineering text: Clues to context. 121st ASEE Annual Conference and Exposition, Indianapolis, IN. Poster presented by Bornasal.

CONFERENCE PUBLICATIONS REFEREED BY ABSTRACT

Bornasal, F.B. & J. Walsh. (2017, April 7). Tracking student conceptual understanding of mechanics concepts across contexts: A plan for research. 86th Annual Pacific Northwest Section ASEE Conference, Seattle, WA. Presented by Bornasal.

Walsh, J. & F. B. Bornasal. (2017, April 7). Developing instructional methods and materials in an engineering graphics course to improve spatial recognition. 86th Annual Pacific Northwest Section ASEE Conference, Seattle, WA. Presented by Walsh.

CONFERENCE PRESENTATIONS AND POSTERS REFEREED BY ABSTRACT

Bornasal, F.B. & S.A. Brown (2015). *Understanding the role of transportation engineering concepts in work practices, interactions, and activities.* Poster presented at OSU CCE/MIME Graduate Research Exposition.

Bornasal, F.B. (2014, March 6). *Prevalence of inscriptions in transportation engineering text: Clues to context.* Poster presented at OSU CCE/MIME Graduate Research Exposition.

Bornasal, F.B. (2013, June 23-26). *Prevalence, abstraction, and meaningful relationships of visual representation in transportation engineering education*. Poster Presented at 2013 ASEE Annual Conference and Exposition, Atlanta, GA.

PROFESSIONAL EXPERIENCE

Skillings Inc., Lacey, WA, Traffic Engineer II (EIT), April 2017 – Present

- **Project Lead**: Local Road Safety Plan (Garfield County, Columbia County)
- Technical Lead: Intersection Control Evaluation (WSDOT), Traffic Impact and Scoping Report (WSDOT), Traffic Impact Analysis (Michels, Oakhurst Multifamily, Twin Transit Regional Transit), Speed Study (City of Fife), Intersection Analysis (Mason County), Photometric Analysis for Roadway Lighting (City of Bremerton, WSDOT)
- **Project Engineer:** Workzone Capacity Analysis (WSDOT), City of Tacoma Permeable Pavements at iDEA School (Survey of Professional Practice for Permeable Pavements, Materials Testing of Permeable Pavements)
- Supported other projects by completing trip generation estimates, cost estimates, drafting, report completion and editing, document review

Garfield County Public Works, Pomeroy, WA, Consulting Engineer (EIT), May 2016 – September 2016

- **Project Lead:** Garfield County Road Safety Improvement Plan
- Project Inspector (Temporary): Gould City-Mayview Road Phase III

CH2M Hill, Portland, OR, Engineering Intern (EIT), July 2014 – November 2014

- **Project Engineer:** OR47 Intersections w/ David Hill Road and Verboort and Purdin Roads: Alternatives Analysis
- Supported other projects by completing cost estimates, drafting, and document review

Garfield County Public Works, Pomeroy, WA, Project Inspector, June 2011 - September 2011

• **Project Inspector**: Peola Road Phase I

Community Frameworks, Spokane, WA, AmeriCorps Volunteer-in-service-to-America (VISTA), September 2009 - September 2010

• **Project Lead**: East Central - Housing Survey, East Central – Neighborhood Survey

Garfield County Public Works, Pomeroy, WA, Engineering Intern, (Summers) May 2005 - September 2009

- Project Lead: Life Cycle Cost Analysis of County Equipment, Pit Reclamation Studies, Digitation of County Roadway Maps
- Supported other projects by drafting and editing technical reports, drafting, reviewing digital data, temporary inspection of chip seal projects, completing technical analysis

Keltic Engineering, Lewiston, ID, Engineer Tech/Assistant, June 2008 – September 2008

• Supported various projects by drafting and reviewing SWPPPs, cost estimates, completion and primary authorship of traffic studies, foundation inspections

UNDERGRADUATE STUDENT ACADEMIC ADVISING

- Faculty Advisor for Civil Engineering Majors, Fall 2015 Present
- Faculty Advisor for Incoming Students, Summers (2016-2019)

GRADUATE STUDENT ADVISING and COMMITTEE MEMBERSHIP

Graduate Students – Major Advisor - Completed

- Simaran Thapa, MSCE, Saint Martin's University, May 2023, (Project: "Use of 3D Modelling software to model proposed changes to Boldman Grade")
- Paul Wallace, MSCE, Saint Martin's University, May 2022, (Project: "Safety analysis of the I-5 to SR-510 Marvin Road Diverging Diamond Interchange")
- Bruno Barbosa de Souza, MSCE, Saint Martin's University, May 2022, (Project: "Strategy for Prioritization of Roadway Pavement Maintenance for the City of Yelm, WA")
- Sarah Bogue, MSCE, Saint Martin's University, May 2021, (Project: "Traffic Impact Analysis near State Route 522 and Paradise Lake Road")
- Victoriya Polishchuk, MSCE, Saint Martin's University, May 2021, (Project: "Romance Hill Road Extension")
- Housam Salamah, MSCE, Saint Martin's University, May 2021, (Project: "Hosting a Temporary Vaccination Center at Saint Martin's University")
- Anthony Guererro, MSCE, Saint Martin's University, August 2020, (Project: "Chehalis Basin Flood Study: A comparative analysis of three alternative designs")
- Madison Lyon, MSCE, Saint Martin's University, May 2020, (Project: "A Comparative Analysis Between Dam Breach Modeling Software: DSS-WiseTM and HEC-RAS 2D")
- Benjamin Reduque, MCE, Saint Martin's University, December 2018, (Project: "Stream Simulation Aquatic Organism Passage at Road-Stream Crossing")

- Kirby Neale, MCE, Saint Martin's University, August 2017, (Project: "Point Brown Sidewalks Project: Decision Matrix Analysis")
- Joe Norman, MCE, Saint Martin's University, May 2017, (Project: "MacKaye Harbor Road Feasibility Study")

Graduate Students – Committee Member - Completed

- Yuxin Song, MSME, Saint Martin's University, June 2023, (Thesis: "Design improvement and field test for biogas power generation system")
- Lance Evan Slichko, MSCE, Saint Martin's University, May 2023, (Project: "Structural Component Reconfiguration of the Hampton Inn & Suites Tacoma/Puvallup")
- Sean Gestson, Ph.D., Oregon State University, August 2022, (Dissertation: "Understanding the Similarities and Differences Between Academia and the Engineering Workplace through Barriers to Adoption, Epistemic Beliefs, and Problem-Solving Behavior")
- Matthew Cross, MSCE, Oregon State University, June 2022, (Thesis: Development of authentic engineering curriculum through collaborative development: Research and development and adoption")
- Brenda Arellanoquintana, MSCE, Saint Martin's University, April 2021, (Project: "Redesign LEED Residential")
- Vincent Roux, MSME, Saint Martin's University, March 2021, (Thesis: "Characterizing potential damage to landers and their payloads caused by regolith ejecta during operations on or near the surface of the Moon and other worlds")
- Jarad Roschi, MCE, Saint Martin's University, December 2020, (Project: "Conceptual design for an underground hyperloop route through the San Andreas Fault")
- Chalese Dion Smartt, MCE, Saint Martin's University, June 2020, (Project: "Structural Design of an Underground Concrete Emergency Shelter with an Analysis Comparing Varying Concrete Thicknesses")
- William J. Miller III, MCE, Saint Martin's University, May 2018, (Thesis: "Seismic Resiliency: Application of shape memory alloy and engineered cementitious composite in bridge design, producing self-centering columns")
- Micaylla O'Leary, MCE, Saint Martin's University, May 2018, (Thesis: "Bridge element deterioration of concrete substructures")
- Jasper Heckman, MCE, Saint Martin's University, May 2018, (Project: "Scour design for Elwha River Bridge")
- Cameron B. Reece, MCE, Saint Martin's University, March 2018, (Project: "Developing the North Spokane Corridor US 395 Euclid Avenue Overcrossing")
- Samuel Rowswell, MCE, Saint Martin's University, May 2017, (Project: "Cascade Creek Realignment")
- Edgar Castro, MSCE, Oregon State University, September 2016, (Thesis: "A state of practice of safety and big data in transportation engineering curricula and in transportation design: How is it used and how can academic offerings better represent industry practices?")
- Jorge Miranda, MSCE, Oregon State University, June 2016 (Project: "Engineering Expertise and the Student to Professional Transition")
- Varun Teja Kalyanam, MCE, Saint Martin's University, May 2016, (Project: "The study of traffic flow characteristics of an urban road")
- Maneendra Trinath Sura, MCE, Saint Martin's University, May 2016, (Project: "Testing and comparison of Coconut Fiber Reinforced Concrete with Unreinforced Plain Concrete")

 Naren Chowdary Gunnam, MCE, Saint Martin's University, May 2016, (Project: "Analyzing Freeway Ramp Metering on Marvin Rd. Northbound and Southbound I-5, Washington State during Rush Hour")

CURRICULUM AND FACULTY DEVELOPMENT

- Virtual Vocation Workshop Curriculum Development, Lead Faculty Developer, Spring 2024
- Center of Scholarship and Teaching Summer Workshop, **Session Organizer and Lead**, "Establishing Electronic Tenure and Promotion Files", May 2023

CONFERENCE, SESSION, AND WORKSHOP LEADERSHIP

- American Society for Engineering Education Conference, **Session Moderator** ("Discussions in Research Methodology: ERM Roundtable"), June 2015
- American Society for Engineering Education Conference, Session Organizer ERM, January 2015 -June 2015
- Region X Student Transportation Conference at Oregon State University, Planning Committee
 Member, 2011
- Enhancing Understanding of Concepts and Practices of Science (EUCAPS) Workshop, Content Consultant, June 2013

OTHER PRESENTATIONS, GUEST LECTURES, DEVELOPMENT, TRAINING

- Oregon State University CE 507 Panel Presentation, **Panel Member**, "PhD into Academia", (2024, October 31)
- Engineering Awareness Day, **Faculty Lead**, "Civil Engineering Capstone Projects", February 2019 2024
- South Thurston Economic Development Initiative (STEDI) Meeting, **Co-Presenter**, "Civil Engineering Design at SMU: Student-Industry Partnerships", (2023, May 19)
- American Society of Civil Engineers (ASCE) vTech Construction Institute (CI), **Panel Member**, "Diversity and Inclusion in the Construction Industry Part II", (2020, September 14)
- SMU Beyond Inclusion, Beyond Empowerment Workshop, Trainee/Participant, (Spring 2020)
- Friday Faculty Lunch, **Presenter**, "Teaching in the Benedictine Scholars Program," (November 2019)
- New Faculty Orientation Training Session, **Presenter**, "Teaching at Saint Martin's University" (2018, April 16)
- Women of Color Panel Campus Life, Panel Member, "Women Helping Women" (2018, April 11)
- Just Talk Diversity and Equity Center, **Panel Member**, "Generation 1.5: Discussion on being an immigrant in the United States" (2018, February 22)
- Friday Faculty Lunch, **Panel Member**, *International Student Engagement Series* (2016, November 19)
- Friday Faculty Lunch, **Presenter**, "Knowledge Transfer" in the Field of Engineering: Relating Concept, Knowing, and Context (2016)
- ESL083 University Prep Bridge to Success at Saint Martin's University, **Guest Lecturer**, *Discussion on instructor expectations and university syllabi* (2016, September 20)
- **Presenter** (in place of G. Panther at 122nd ASEE Annual Conference and Exposition) (2015, June 14-17) *Panther, G., D. Montfort, & S.A. Brown. (2015). Instructor concerns and use of resources*

- in the development of course materials. 122^{nd} ASEE Annual Conference and Exposition, Seattle, WA.
- CHE507 Chemical Engineering Seminar at Oregon State University, **Guest Lecturer**, *The Role of Transportation Engineering Concepts in Work Practices, Interactions, and Activities* (2015, February 16)
- Cougar Undergraduate Research Experience (CURE) at Washington State University, **Presenter** and Mentor, *Type of Literature and Sources* (2013, June)

COMMUNITY SERVICE ACTIVITIES

- Asian Pacific Islander American Scholarship Fund, Scholarship Application Reader, 2010-2011
- East Central Neighborhood Council, **Sidewalk Committee Co-chair**, 2009-2010
- Pedestrian, Traffic, and Transportation (PeTT), **East Central Neighborhood Representative**, 2009-2010, Spokane, WA
- East Central Neighborhood Council, **Ad-hoc Photo Red Funding Traffic Committee member**, 2009-2010, Spokane, WA

PEER REVIEW AND EDITING

- American Society of Civil Engineers, Journal of Civil Engineering Education, Associate Editor, 2022
 2023
- American Society of Civil Engineers, *Journal of Professional Issues in Engineering Education and Practice*, **Reviewer**, August 2019 May 2020
- American Society for Engineering Education, Journal of Engineering Education, Reviewer, August 2019

HONORS AND AWARDS

TEACHING

- Monks of Saint Martin's Abbey Outstanding Faculty, Saint Martin's University,
 - o Awarded: May 2017
 - o Nominated: May 2025, May 2023, May 2021, May 2018, May 2017, May 2016

<u>ADVISING</u>

- Associated Students of Saint Martin's University (ASSMU) Club Advisor of the Year Award,
 - o Awarded: April 2025, April 2023
 - o Nominated: April 2025, April 2023, April 2022
- Advisor of the Month, Pacific Affiliate of College and University Residence Halls [Awarded November 2024]
- Advisor of the Month, St. Martin's University National Residence Hall Honorary [Awarded November 2024]

RESEARCH, PROFESSIONAL, AND SCHOLARLY WORK

- 2024 Best Technical Paper Award, ASCE Journal of Civil Engineering Education: Gestson, Brown, Ahmed, Hurwitz, Bornasal, & Desing (2024) [Awarded May 2025]
- Outstanding Editor Award, ASCE Journal of Civil Engineering Education [Awarded June 2023]
- William Elgin Wickenden Award American Society of Engineering Education, Journal of Engineering Education: Barner, Brown, Bornasal, & Linton (2021) [Awarded April 2023]
- Honorable Mention for William Elgin Wickenden Award for the American Society of Engineering Education, Journal of Engineering Education: Bornasal, Brown, Perova-Mello, & Beddoes (2018)
 [Awarded March 2019]
- Emerging Scholar, Diverse: Issues in Higher Education [Awarded January 2019]

ENGINEERING PRACTICE

- Honorable Mention for 2019 National Roadway Safety Awards, Roadway Safety Foundation and Federal Highway Administration: Garfield County Roadway Safety Plan (Co-Author of Plan) [Awarded October 2019]
- 2013 Award of Excellence/Director's Award at Washington County Leaders Conference, Washington State Department of Transportation and Federal Highway Administration: Garfield County Peola Road Project (Member of Public Works Team for Project) [Awarded November 2013]

OTHER AWARDS

- Gates Millennium Scholars Fellowship (Graduate), September 2010 June 2015
- Gates Millennium Scholars Program (Undergraduate), August 2005 May 2009
- Maurice D. Rausch Outstanding Senior Civil Engineering Award, Saint Martin's University [Awarded May 2009]
- Ralph Swanson Leadership Award, Saint Martin's University [Awarded April 2009]
- Society of Fellows Member, Saint Martin's University [Awarded April 2009]

PROFESSIONAL AFFILIATIONS

- American Society for Engineering Education, 2012 Present
- Society of Women Engineers, 2008 Present
- American Society of Civil Engineers, 2006-Present
- Institute of Transportation Engineers, 2010-Present
- American Railway Engineering and Maintenance of Way, 2010-2012

PROFESSIONAL REGISTRATION

Engineer in Training, Washington, License 29570