

BRAULIO ANDRES COVARRUBIAS VARGAS

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EDUCATION

University of Oklahoma (OU) Norman, OK
M Sc. in Civil Engineering Expected May 2021
GPA 3.67/4.00

B Sc. in Civil Engineering Graduated May 2020
GPA 3.57/4.00
Academic Distinction, UWC-Davis Scholar, President's Honor Roll (4), Dean's Honor Roll (4), Member of Chi Epsilon, Sooners Without Borders, The United World

PROFESSIONAL EXPERIENCE

Guest Scholar Bethlehem, PA
Lehigh University – Natural Hazards Engineering Research Infrastructure Jul – Sep 2020

- Received training on Real-Time Hybrid Simulations
- **Planned**, designed and performed 240 tests (characterization, free-vibrations, RTHS) for an isolation unit
- Developed MATLAB codes to obtain, filter, and analyze force-displacement and time-history diagrams

Graduate Research Assistant Norman, OK
OU Gallogly College of Engineering May 2020 – Present

- Conduct data gathering and analysis in the field of Structural Dynamics
- Preparing technical reports, paperwork and presentations demonstrating research findings
- Designed and built an equipment isolation unit under an NSF-EPSCoR Track 4 project
- Currently writing 3 journal articles to be published in 2021

Junior Application Administrator & Data Analyst Norman, OK
OU – Information Technology Feb 2018 – May 2020

- Research new trends in online learning that might be suitable for the University of Oklahoma
- Offer support to students, staff and faculty with LMS (Canvas) and other virtual services (Qualtrics, MyMedia)
- Create and maintain support documentation in IT's Knowledge Management Tool (ComAround)
- Use business analytic services software (Power BI) to visualization and arrange data and data relationships
- Provide world class technology support to a campus population of over 30,000 (approx. 190 classrooms and computer laboratories)

Student Researcher | Urban Concepts in Sustainable Transition Emmendingen, Germany
European College of Human Ecology Jul 2018 – Aug 2018

- Propose, research, and present a project incorporating sustainability related concepts
- Develop and innovate on sustainable urbanism practices (i.e. bike-sharing systems) suitable for the city of Emmendingen

SKILLS AND INTERESTS

Software: AutoCAD, Civil 3D, SketchUp, Revit, MATLAB, Python, RISA 2-D, MultiFrame, WaterCAD, Power BI, Qualtrics, Microsoft Office Suite.

Languages: Spanish (Native), English (Proficient), Portuguese (Beginner)

Interests: Structural Engineering, dynamics and building resilience, structural restoration, forensic engineering, Transportation Engineering, bridges, architecture, reading, sustainability, clean energies.

LEADERSHIP

Chief Information Officer | OU Structural Engineering Institute August 2020 - Present

- Manage and overview the organization's official documents
- **Record**, organize and publish monthly meeting minutes

Marketing and Display Lead | OU Steel Bridge Competition Team May 2019 – May 2020

- Designed and distributed the teams' advertising and recruiting posters, flyers, t-shirts every other week
- Coordinated with other leading positions to schedule biweekly general meetings
- **Designed**, fabricated, and built 1:10 scale steel bridge to represent the University of Oklahoma at the Regional ASCE Student Steel Bridge Competition