NATALIE GEORGIEFF, P.E.

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EDUCATION

2010 Master of Science, Civil Engineering (Structural), University of Washington, Seattle, WA

- 2009 Bachelor of Science, Civil Engineering (Structural), University of Washington, Seattle, WA
- 2005 Associate of Arts & Science, Olympic College, Bremerton, WA

PROFESSIONAL CERTIFICATIONS

Licensed Professional Engineer (Civil):

Minnesota, Cert. No. 56771, active since 2018

California, Cert. No. C82382, active since 2013

EXPERIENCE

3/2024 - Present

<u>Center for Sustainable Building Research (CSBR)</u> - University of Minnesota - Twin Cities RESEARCH FELLOW

- Sustainable Material Research
 - o Support the center's work on sustainable materials, including environmentally preferable materials in the construction industry
 - o Support the CSBR's work on the state's Buy Clean initiative
 - o Coordinate with teams, gather & analyze data, compile reports & presentations
 - o Develop informational briefs based on established protocols for technologies employed by the building sector for sustainable materials.
- Building, Benchmarks, and Beyond (B3) and SB2030
 - Research aspects of the Building, Benchmarks, and Beyond (B3) Minnesota's green building rating system including Site/Water, Energy, Materials/Waste, Indoor Environmental Quality and Process/Performance
 - o Research sustainable indicators of materials, Materials/Waste guidelines, project performance, and future research directions
 - o Develop metrics and guidelines for the B3 program
 - o Transform research into green building tools

6/2022 - Present

<u>GRAEF</u> - Minneapolis, Minnesota

STRUCTURAL ANALYST | SUSTAINABILITY & RESILIENCE ENGINEER

- Conduct Structural Whole Building Life Cycle Assessments (WBLCAs) to produce sustainability reports, embodied carbon data dashboards, and recommendations for carbon reduction strategies
- Collaborate with project teams, subconsultants, and manufacturers to implement sustainability strategies and obtain up-to-date carbon data including EPDs (Environmental Product Declarations)

- Led the effort to sign on to the SE 2050 Commitment (firm-wide commitment) & became the Embodied Carbon Champion responsible for fulfillment of program requirements & communications; Presented 2 firm-wide webinars: Embodied Carbon and SE 2050, Tally LCA Training
- Formed the "Structural Sustainability Committee" and the "Resilience Champions Team" and led regular meetings as Committee Chair; Co-led communications initiatives including webpage development (graef-usa.com/se2050/)
- Facilitated implementation of the firm's Strategic Plan by championing firm-wide Resilience & Sustainability, compiling research to formulate an internal innovation program, and conducting regular meetings with stakeholders to develop and track goals, metrics, and milestones.
- Analyzed and designed structures for lateral and gravity loads, aided in 3D building modeling and BIM workflow efficiency, and produced permit and construction drawings

10/2015 - 6/2022

DLR Group - Seattle, WA (2015-2018) & Minneapolis, MN (2018 - 2022) ASSOCIATE | STRUCTURAL DESIGNER

- Performed lateral and gravity analyses of buildings, created and maintained 3D building models, produced construction drawings, and provided continuous coordination & integrated design with in-house architects, mechanical & electrical engineers with a focus on K-12 projects
- Performed Structural Building Life Cycle Assessment Case Studies as a member of the internal "Embodied Carbon Task Force" (since 2020); Co-authored <u>"A Carbon-Free Future"</u> (https://www.dlrgroup.com/idea/se-2050-commitment/)
- Planned and launched an office-wide Mentorship Program as a co-chair of the "Minneapolis Mentorship Steering Committee" (2021-2022)
- Organized numerous in-office events as a member of the "Culture Committee" and as Chair of the "Health & Wellness Committee"

2/2015 - 6/2015

<u>The Hand in HeArt Project</u> - Project Ecohut - Siem Reap, Cambodia STRUCTURAL DESIGNER | PROJECT MANAGER | GENERAL CONTRACTOR | BUILDER

- Designed and constructed an Eco-Education Library with a timber roof and earthbag walls
- Raised funds, sourced local materials, scheduled and budgeted project from start to finish
- Managed a team of volunteers and construction workers and worked with local organizations to provide ongoing support by way of materials and educational staffing at the library

4/2011 - 2/2015

<u>KPFF Consulting Engineers</u> - Seattle, Washington STRUCTURAL DESIGN ENGINEER

- Analyzed and designed structural members for a variety of building projects (high seismic design)
- Lead project engineer for construction support of a 4-story concrete Hi-Ed building
- Designed temporary excavation shoring, including coordination and construction support

COMPUTER SKILLS

Microsoft Office Suite: Teams, Forms, OneNote, Excel, Word, Outlook, PowerPoint Google Suite: Calendar, Drive, Slides, Docs/Sheets, Google Meet, Gmail, Gchat Autodesk: AutoCAD, REVIT (including Tally, NuBim, and other plug-ins), BIM360 LCA/EPD Software: Tally, TallyCAT, EC3, Athena, ECOM, NRMCA Concrete Carbon Calculator Structural Software: SAFE, SAP2000, Enercalc, Hilti Profis, & ETABS Additional Software/Tools: Newforma, MURAL, Bluebeam Revu & Studio, Canva

ORGANIZATIONS / PROFESSIONAL ACTIVITIES

Carbon Leadership Forum - Minnesota Hub Subgroups: Structural, Specifications & Products/Manufacturers, Carbon Tools US Green Building Council Member

AWARDS / HONORS

University of Washington

Graduated with Baccalaureate Honors, Cum Laude, 2009

Chi Epsilon Engineering Honor Society, 2009

Numerous Dean's List Awards, 2007-2009

Structural Engineers Association of Washington (SEAW) Scholarship Award, 2008

University of Washington, Civil & Environmental Engineering Departmental Scholarship Award, 2007

PRESENTATIONS

NSPE-WI (WSPE) Wisconsin Society of Professional Engineers - Annual Discovery Conference 2023 April 11, 2023 - "Embodied Carbon in Structures"