GUILLERMO NEVETT FERNANDEZ

CURRICULUM VITAE

808.936.3025 :: Boulder, CO guillermonevett@gmail.com

Education

University of Colorado, Boulder

2015 - 2019

Ph.D. in Civil Engineering

University of Colorado, Boulder

2015 - 2016

Masters of Science from the Department of Civil, Architectural, and Environmental Engineering Six-sigma statistical practitioner certificate

Universidad Metropolitana, Caracas, Venezuela

2007 - 2011

Bachelors of Science from the College of Engineering

Major in Civil Engineering, Concentration in Structural Engineering

Research + Professional Positions

Implementation Leader, Strategic Project Solutions Inc.

2020 - Present

Project Production Management Implementation Operation Sciences

Houston, TX

Lead the implementation of a Project Production Management solution (the application of operations science) in the delivery of capital projects (engineering, fabrication, construction, commissioning) across the world, including: oil and gas refineries, off-shore platforms, chemical plants, manufacturing plants, technology data centers, etc.

Educate and train project stakeholders (from foremen to upper management) on Project Production Management concepts, software and analytics in order to better plan, control and optimize work execution.

Postdoctoral Research Associate, University of Colorado - Boulder, Department of CEAE 2020 - 2021 Construction Engineering and Management, Laboratory of Dr. Paul M. Goodrum, Nicholas R. Petry Professor in Construction Engineering and Management

Task Order #011: Assessment of FHWA Highway Project Cost Estimation Tools. Co-PI.

Managed an inter-agency team that created guidelines to achieve approach for cost estimate development and oversight. Worked with multiple State Transportation Agencies (STAs) and the Federal Highway Administration (FHWA). This research was funded by the FHWA and the final deliverables are to be distributed and used by FHWA Federal Aid Division Offices and STAs nationwide.

Graduate Research Assistant, University of Colorado - Boulder, Department of CEAE 2015 - 2019 Construction Engineering and Management, Laboratory of Dr. Paul M. Goodrum, Nicholas R. Petry Professor in Construction Engineering and Management

- ▷ TPF-5(260) Project Four: Construction Production Rates for Estimating Contract Time
 - Created a tool to estimate the duration of transportation construction projects using Artificial Neural Networks for the Colorado Department of Transportation (CDOT). The tool is used in every CDOT project and is being replicated by multiple STAs
 - Compared the benefits of using ANN versus traditional estimating methods for project durations
 - Created a metric to measure construction productivity at an industry level
- NCHRP 10-96: Guide for Civil Integrated Management (CIM) in Departments of Transportation Conducted an exhaustive literature review to determine the current practices and technologies being used in Civil Integrated Management (CIM). The team produced a guide that describes the current uses and challenges regarding the implementation of CIM

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SOLTEC NPN, Founder, 2012-2015

Concrete Coring and Sawing Solutions

Caracas, Venezuela

Lead concrete coring, sawing, and demolition projects

- Supervised workers and manage tools across multiple projects
- ▷ Estimate and analyze unit price cost

Project Engineer 2011 - 2012

Obrein C.A., Geotechnical solutions

Caracas, Venezuela

- Led construction of an 80,000 ft2 anchored wall for a basement with a \$3,000,000 budget
- Supervised workers and interacted with subcontractors and laborer's union
- Ordered and tracked materials to ensure delivery on time
- ▷ Interacted with owner to define details

Additional

Certifications: Six-sigma statistical practitioner, Operation Science, Project Production Management, Supply Flow Control, Project Production Control

Software: R, Stata, Python, AutoCAD, Git, Sketchup, Revit, Bentley, SPSS Statistics Microsoft Office Suite (Word, Visio, Excel, Powerpoint, Outlook, OneNote)

Languages: Spanish, English

Talks + Presentations

Panelist TRB Webinar: Practices for Establishing Contract Time for Highway Projects July 12 2018

Design-Build Performance over the Years: An Exploration into Colorado's Experience.",

April 2018

Construction Research Congress, New Orleans, LA

Using Statistical Models Based on Historical Project Data to Estimate Durations for Transportation April 2017

Projects

Construction Research Congress, Vancouver, BC

Selected Publications

Journals

Sankaran B., O'Brien, Goodrum, **Nevett, G.**, and Johnson, J. (2018). "Civil Integrated Management Systems State of Practice among U.S. State Transportation Agencies." Elsevier J. of Automation in Construction. 87(2018). pp. 84-95 **Nevett G**, Goodrum PM, Littlejohn RL. Understanding the Effect of Bid Quantities, Project Characteristics, and

Project Locations on the Duration of Road Transportation Construction Projects during Early Stages. Transportation Research Record. October 2020

Duffy, M. R., Lasser, G., **Nevett, G.**, Roberg, M., and Popović, Z. (2019). "A three-stage 18.5–24-GHz GaN-on-SiC 4 W 40% efficient MMIC PA." IEEE Journal of Solid-State Circuits, IEEE, 54(9), 2402–2410

Nevett G, Goodrum PM, Littlejohn RL. Understanding Productivity in the Transportation Construction Industry. Transportation Research Record. Under review for publication

Technical Reports

O'Brien, WJ., Bharathwaj S, Leiteb FL, Khwaja N, De Sande Palma I, Goodrum PM, Molenaar K, **Nevett, G**, and Johnson J. (2016). Civil Integrated Management (CIM) for Departments of Transportation, Volume 1: Guidebook. NCHRP No. Project 10-96. National Academies. Washington, DC.

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Conference Papers

Alleman, D., **Nevett, G.**, and Goodrum, P., (2018) "Design-Build Performance over the Years: An Exploration into Colorado's Experience." Construction Research Congress (Construction Research Congress, April 2 2018, April 5 2018)

Nevett, G., Alleman, D., and Goodrum, P., (2017) "Using Statistical Models Based on Historical Project Data to Estimate Durations for Transportation Projects." International Society of Civil Engineering Congress (International Society of Civil Engineers, April 2 2018, April 5 2017)

Nevett, G., Goodrum, P. (2017). "Estimating Contract Times for Transportation Projects: Creating A Statistical Model to Estimate Times Using Bid Quantities." International Construction Specialty Conference (ICSC), Vancouver, June 3, 2017

References

Available upon request.