Agustin Guerra

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Professional Profile

Highly motivated engineering professional with 5+ years of experience in the transportation industry. Committed to providing high-quality service focusing on innovation, safety, sustainability, operational performance, diversity, equity, and inclusion. Currently seeking internship opportunities in Transportation Engineering.

EDUCATION

PhD candidate in Civil Engineering

Aug. 2019 – Expected May 2023

University of Florida

Gainesville, FL

MS in Civil Engineering
University of Kansas

Aug. 2017 – May 2019 *Lawrence*, *KS*

BS in Civil Engineering

Mar. 2008 – May 2013

Universidad Tecnologica de Panama

Panama, PA

TECHNICAL SKILLS

Expertise: Transportation Engineering, Statistical Analysis, Operation Research, Machine Learning

Languages: Python, R

Softwares: AutoCAD Civil 3D, Infraworks, Slide-Rockscience

Developer Tools: Github, Visual Studio

Libraries: Pandas, NumPy, Matplotlib, CPLEX

EXPERIENCE

Graduate Research Assistant

Aug. 2019 – Present

University of Florida

Gainesville, FL

- Develops optimization algorithms for corridors considering automated-vehicles capabilities
- Assists on the implementation of optimization algorithm for isolated intersections
- Assists in the coordination of projects activities to meet deadlines
- Teaching Assistant for TTE 6267: Traffic Flow Theory

Highway & Traffic Consultant

May 2019 - Aug. 2019

WSP

Panama

- Provided safety assessment for roadways, interchanges, and intersections
- Developed geometric design proposals
- Conducted earthwork estimation for highway projects

Highway Engineer

Nov. 2012 – Aug. 2017

Louis Berger

Panama

- Developed geometric designs for proposal and as-built drawings for highway projects. Project portfolio comprises several projects in the Latin American region (Panama, Colombia, Honduras, and Peru) adding up to \$3 billion in construction amount
- Coordinated with different departments (geotechnical, hydraulic, and pavement) to meet deadlines
- Developed digital model terrain for highway projects
- Assisted with slope stability analysis
- Supervised and trained drafter team (4 people)

Awards & Service

ITE Student Chapter VP: Coordinated student seminars and ITE activities

Student Representative at the Internal Steering Committee at UFTI: Promoted engagement activities between industry professionals and students

Fulbright Fellowship: Awarded by the U.S Bureau of Educational and Cultural Affairs to complete a Master's Degree at the University of Kansas

Global Best Project in Roads and Highways: Awarded by the ENR for the Coastal Beltway project in Panama

4th Bridge over the Panama Canal | Panama 2019 • Provided visibility and safety assessment for intersections and roadways • Developed geometric design alternatives for interchanges • Construction cost: \$1.2 billions Corredor Panama Norte | Panama 2016 • Played a major role in the coordination of the project • Developed design drawings and calculations including 3D models of roadways, roundabouts, and interchanges • Provided earthworks estimation 2015 Perimetral Oriental de Bogota | Colombia • Coordinated with other departments (geotechnical, hydraulic, surveying) to meet deadlines Developed design drawings and calculations including 3D models of roadways, intersections, and interchanges • Trained and supervised drafter team • Construction cost: \$428.0 millions 2014 Panamerican Highway Widening Santiago - Vigui | Panama • Provided design alternatives including 3D models and drawings for intersections • Assisted with the slope stability analysis by modeling 2D models of critical sections • Construction cost: \$340.0 millions Corredor Turistico La Barca – El Progreso – Tela | Honduras 2014 • Provided design drawings for roundabouts and urban sections including sidewalks, and bus-stops Assisted with the traffic signs drawings using the MUTCD and local guidelines • Construction cost: \$120.0 millions Slope Stabilization Studies 53 km | Panama 2014 • Assisted with the slope stability analysis Assisted with the study of ground improvement alternatives • Construction cost: \$0.4 millions Amador Causeway Widening | Panama 2014 • Assisted with the geometric design of roundabouts • Participated in the creation of the digital terrain model • Assisted with the modeling of critical sections for embankments stability analysis • Construction cost: \$95.0 millions 2012 Coastal Beltway | Panama · Developed design drawings for roadways including roundabouts, marine viaducts, and interchanges • Construction cost: \$ 45 millions References Lily Elefteriadou, PhD: Barbara Goldsby Professor, University of Florida elefter@ce.ufl.edu

Aurora Izquierdo: Civil Structural Engineer II, WSP

Juliana Canas: Senior Advisor, First Climate

Julio Aysa: Env./Social and Governance Lead Officer, IDB

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