

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 job opportunities in Transportation Engineering.

EDUCATION

PhD candidate in Civil Engineering <i>University of Florida</i>	Aug. 2019 – Expected May 2023 <i>Gainesville, FL</i>
MS in Civil Engineering <i>University of Kansas</i>	Aug. 2017 – May 2019 <i>Lawrence, KS</i>
BS in Civil Engineering <i>Universidad Tecnologica de Panama</i>	Mar. 2008 – May 2013 <i>Panama, PA</i>

TECHNICAL SKILLS

Expertise: Transportation Engineering, Statistical Analysis, Operation Research, Machine Learning
Languages: Python (Proficient), R (Intermediate)
Software: VISSIM, HCS, AutoCAD Civil 3D, Infraworks, Slide-Rockscience
Developer Tools: Github, Visual Studio
Libraries: Pandas, NumPy, Matplotlib, CPLEX

EXPERIENCE

Graduate Research Assistant <i>University of Florida</i>	Aug. 2019 – Present <i>Gainesville, FL</i>
<ul style="list-style-type: none">• Develop optimization algorithms in Python for arterials considering automated-vehicles capabilities• Assist on the implementation of optimization algorithm for isolated intersections• Assist in the coordination of project activities to meet deadlines• Teaching Assistant for TTE 6267: Traffic Flow Theory	
Highway & Traffic Consultant <i>WSP</i>	May 2019 – Aug. 2019 <i>Panama</i>
<ul style="list-style-type: none">• Provided safety assessment for roadways, interchanges, and intersections• Developed geometric design proposals• Conducted earthwork estimation for highway projects	
Highway Engineer <i>Louis Berger</i>	Nov. 2012 – Aug. 2017 <i>Panama</i>
<ul style="list-style-type: none">• 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)	

SERVICE & AWARDS

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

ITS Florida Anne Brewer Academic Scholarships: Awarded by the ITS Florida Chapter

Fulbright Fellowship: Awarded by the U.S Bureau of Educational and Cultural Affairs

Global Best Project in Roads and Highways: Awarded by the [ENR](#) for the Coastal Beltway project in Panama

RELEVANT PROJECTS

4th Bridge over the Panama Canal <i>Panama</i>	2019
<ul style="list-style-type: none">• Provided visibility and safety assessment for intersections and roadways• Developed geometric design alternatives for interchanges• Construction cost: \$1.2 billions	
Corredor Panama Norte <i>Panama</i>	2016
<ul style="list-style-type: none">• 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	
Perimetral Oriental de Bogota <i>Colombia</i>	2015
<ul style="list-style-type: none">• 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	
Panamerican Highway Widening Santiago -Vigui <i>Panama</i>	2014
<ul style="list-style-type: none">• 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 <i>Honduras</i>	2014
<ul style="list-style-type: none">• 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 <i>Panama</i>	2014
<ul style="list-style-type: none">• Assisted with the slope stability analysis• Assisted with the study of ground improvement alternatives• Construction cost: \$0.4 millions	
Amador Causeway Widening <i>Panama</i>	2014
<ul style="list-style-type: none">• 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	
Coastal Beltway <i>Panama</i>	2012
<ul style="list-style-type: none">• 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	Aurora.Izquierdo@wsp.com
Juliana Canas: Senior Advisor, First Climate	juliana.canas-vanegas@firstclimate.com
Julio Aysa: Env./Social and Governance Lead Officer, IDB	jaysa71@yahoo.com.mx