

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

EDUCATION

University of Florida

PhD candidate in Civil Engineering

Gainesville, FL

Aug. 2019 – Expected May 2023

University of Kansas

MS in Civil Engineering

Lawrence, KS

Aug. 2017 – May 2019

Universidad Tecnologica de Panama

BS in Civil Engineering

Panama, PA

Mar. 2008 – May 2013

TECHNICAL SKILLS

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

Languages: Python, R

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

Developer Tools: Github, Visual Studio

Libraries: pandas, NumPy, Matplotlib, CPLEX

EXPERIENCE

Graduate Research Assistant

University of Florida

Aug. 2019 – Present

Gainesville, FL

- Developed optimization algorithms for corridors considering automated-vehicles capabilities
- Assisted on the implementation of optimization algorithm for isolated intersections

Highway & Traffic Consultant

WSP

May 2019 – Aug. 2019

Panama

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

Highway Engineer

Louis Berger

Nov. 2012 – Aug. 2017

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 achieve deadlines
- Developed digital model terrain for highway projects
- Assisted with slope stability analysis
- Supervised and trained drafter team (4 people)

RELEVANT PROJECTS

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

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| 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"> • Played a major role in the coordination of the project • Coordinated with other departments (geotechnical, hydraulic, surveying) to achieve 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 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 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 | |

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 embassy 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

REFERENCES

Lily Elefteriadou, PhD: Barbara Goldsby Professor, University of Florida

elefter@ce.ufl.edu

Gabriel Borrás: Country Manager, WSP

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Juliana Canas: position, company

sofia.berger@wsp.com

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

jaysa71@yahoo.com.mx