

# Agustin Guerra

## Civil Engineer



(858) 888 6716



agustingu.github.io



agustinguerro@ufl.edu



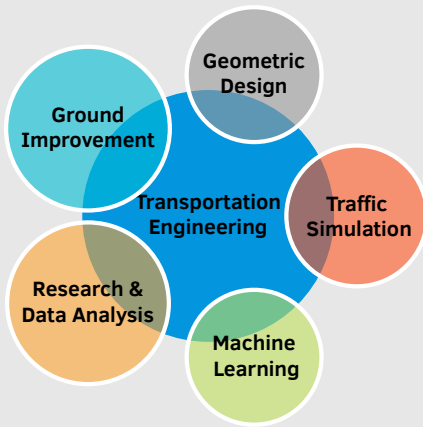
/in/agustin-guerra-h



agustingu

## Technical Skills

### Overview



### Software & Programming Skills

Beginner —————> Advance

AutoCAD C3D • VISSIM • Transmodeler

Python • R •  $\text{\LaTeX}$  • Infracworks

GEOPACK • HCS • Slide Rockscience

## Education

### PhD., Civil Engineering

Specialization: Highway & Traffic

University of Florida

2019 - 2023 (Expected) | Florida, U.S.A

### MSc., Civil Engineering (GPA: 3.83)

Specialization: Highway & Traffic

University of Kansas

2017 - 2019 | Kansas, U.S.A

### BEng., Civil Engineering (GPA: 3.30)

Universidad Tecnológica de Panama

2008 - 2013 | Panama, Panama

## Experience

### Aug 2019 - Present Graduate Research Assistant

UFTI

- Focused on developing optimization algorithms for urban corridors considering Automated Vehicles capabilities.
- Helped with the deployment of traffic control algorithms for real-world implementation.
- Presented several talks, and posters related to optimization algorithms for Automated Vehicles.
- Assisted in the coordination for projects deliverable.
- **Teaching:** TA for TTE 6267: Traffic Flow Theory.
- **Leadership:** Student representative at the Internal Steering Committee (ISC) at UFTI. Co-chair for the task force student-professional engagement. ITE Student chapter vice-president, 2021.
- **Projects:** AVIAN.
- **Tools:** Python, NumPy, pandas, AMPL, CPLEX, VISSIM, Jupyter Lab, Github, R.

### May 2019 - Aug 2019 Highway & Traffic Consultant

WSP

- Provided safety assessments for geometric design, traffic studies, and developed geometric design proposals in the LAC region.
- **Projects:** 4<sup>th</sup> Bridge over the Panama Canal, Maria Chiquita - Portobelo Corridor.
- **Projects' Summary:** With an estimate \$99.8 million the Four bridge over the Panama Canal is one of the latest and ambitious projects in Panama, it includes two main interchanges on both ends connecting the Pan-American Highway with the main transit terminal in the city.
- **Tools:** AutoCAD Civil 3D, Infracworks.

### Jul 2014 - Aug 2017 Highway Engineer

Louis Berger

- Coordinated activities of the design team and provided geometric design of highway projects in the LAC region (Honduras, Panama, Colombia, Peru).
- **Projects:** Corredor Turistico La Barca - El Progreso - Tela, Panamerican Highway (Santiago -Vigui), Line 1 of the Panama Metro, Corredor Perimetral Oriente de Cundinamarca, Corredor Panama Norte.
- **Projects' Summary:** The cumulative construction amount for all of these projects was about \$1.05 U.S billion. The infrastructures considered were mainly interchanges, roundabouts, intersections, and roads on both urban and rural setting.
- **Tools:** AutoCAD Civil 3D.

### Jun 2014 - Nov 2012 Specialist Assistant

Louis Berger

- Assisted with geometric design, traffic signalization, slope stability analysis, and DTM development.
- **Projects:** Slope Stabilization Studies 53 km, Hydroelectric Project Chan II, Amador Road Widening, MSE walls Design of Via Expresa Sur Interchanges, Coastal Beltway.
- **Projects' Summary:** The cumulative construction amount for these projects was about \$1.3 U.S billion. The infrastructures considered were mainly mountainous roads, marine viaducts, and stabilization works.
- **Tools:** Slide-Rockscience, AutoCAD Civil 3D, Mathcad.

## Awards


### Aug 2017 - May 2019 Fulbright Scholarship


ECA


Awarded by the U.S embassy in Panama to complete a Master's Degree at the University of Kansas.


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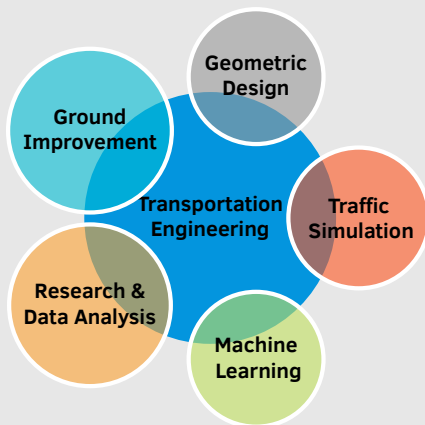
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## Research

May 2018 - **MSc. Candidate**

University of Kansas

May 2019 **Thesis:** Modeling discretionary lane changing decisions for connected vehicles based on fuzzy logic.

- Proposed a fuzzy logic model to assess driving behavior during discretionary lane change under a connected environment.
- Performed data processing and statistical analysis.
- **Tools:** SPSS, MiniSim, Driving Simulator.

## Social Service

2019 - **Gator ITE Student Chapter**

Present

- Served with the Gator ITE Student Chapter on the Adopt a Highway Initiative by the ITE.

2017 - **KUFSA**

2019

- Worked with the Fulbright student chapters at Lawrence, KS assisting with several activities in the community.

2013 - **Louis Berger**

2017

- Worked with the Louis Berger green team in Panama planting trees. Initiative by the Environment Ministry in Panama.

## References

Aug 2019 - **Lily Elefteriadou PhD**

Present

University of Florida

**Director of the UF Transportation Institute**

- Work Phone: (352) 294 7802
- Email: elefter@ce.ufl.edu

Nov 2012 - **Gabriel Borrás**

May 2017

WSP Panama

**Country Manager**

- Cell Phone: +507 6619-5580
- Email: gabriel.borras@wsp.com

Nov 2014 - **Sofia Berger**

May 2017

WSP

**Senior Vice President, Advisory Services**

- Email: sofia.berger@wsp.com