Agustin Guerra

Civil Engineer

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(3)

agustingu.github.io

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/in/agustin-guerra-h



agustingu

Technical Skills —

Overview



Software & Programming Skills

Beginner → Advance

AutoCAD C3D • VISSIM • Transmodeler

Python • R • 上下EX • Infraworks

GEOPACK • HCS • Slide Rocksience

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 Teconologica de Panama 2008 - 2013 | Panama, Panama

Experience

Aug 2019 - **Graduate Research Assistant** Present

• Focus on developing optimization algorithms for urban corridors considering Automated Vehicles capabilities

- Helps with the deployment of traffic control algorithms for realworld implementation
- Presents several talks, and posters related to optimization algorithms for Automated Vehicles
- Assists in the coordination for projects deliverable
- · Assisted as a TA for TTE 6267: Traffic Flow Theory
- Serves as 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 - **Highway & Traffic Consultant** Aug 2019

WSP

UFTI

- Provided safety assessments for geometric design, traffic studies, and developed geometric design proposals in the LAC region
- Projects: 4th Bridge over the Panama Canal, Maria Chiquita Portobelo Corridor
- Projects' Summary: The first project, a cable-stayed bridge has an estimated construction amount of \$99.8 million. While the former was on the feasibility study stage, a 33 km of mountainous road
- Tools: AutoCAD Civil 3D, Infraworks

Jul 2014 - **Highway Engineer** Aug 2017

Louis Berger

- Coordinated activities of the design team and provided geometric design of highway projects in the LAC region (Honduras, Panama, Colombia, and 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 - Specialist Assistant Nov 2012

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 - Fulbright Scholarship

EC/

May 2019

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

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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 asses 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 -2019 **KU Fulbright Student Association**

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

2013 -2017 Louis Berger

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

References

Aug 2019 -

- Lily Elefteriadou PhD

University of Florida

Present

Director of the UF Transportation Institute

• Work Phone: (352) 294 7802

• Email: elefter@ce.ufl.edu

Nov 2012 -

Gabriel Borras

WSP Panama

May 2017 **Country Manager**

• Cell Phone: +507 6619-5580

Nov 2014 -

Email: gabriel.borras@wsp.com

May 2017

Sofia Berger Senior Vice President, Advisory Services

Email: sofia.berger@wsp.com

WSP