Agustin Guerra

Civil Engineer

📱 (858) 888 6716

🌐 agustingu.github.io

✉ agustinguerra@ufl.edu
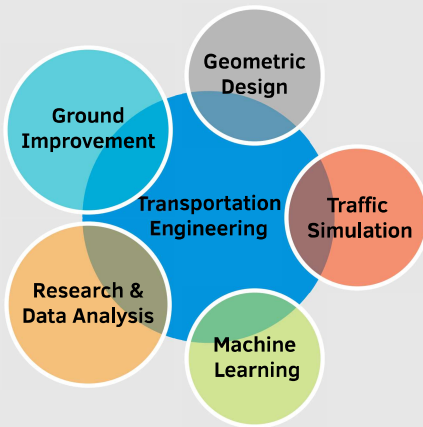
in /in/agustin-guerra-h

⬛ agustingu

Technical Skills

Overview

Software & Programming Skills

Beginner ⟶ *Advance*

AutoCAD C3D • VISSIM • Transmodeler

Python • R • LaTeX • 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 - 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.
- Assists in coordination for project deliverables.
- **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.
- **Projects**: AVIAN.
- **Tools**: Python, numpy, pandas, AMPL, CPLEX, VISSIM, Jupyter Lab, Github, R.

May 2019 - Aug 2019 — **Highway & Traffic Consultant** (WSP)

- Provide safety assessments of geometric design, traffic studies, and develop geometric design proposals in the LAC region.
- **Projects**: 4th 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, Infraworks.

Jul 2014 - Aug 2017 — **Highway Engineer** (Louis Berger)

- Coordination and geometric design for 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 the projects was about $1.05 U.S billion.The infrastructures considered were mainly interchanges, roundabouts, intersections, and roads at the urban and rural setting.
- **Tools**: AutoCAD Civil 3D.

Jun 2014 - Nov 2012 — **Specialist Assistant** (Louis Berger)

- Assisting with geometric design, traffic signalization, slope stability analysis, 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 the 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.