



DR. HOSSAM ABDEL ALL

Senior Traffic Operations and Safety Engineer



Habelall@ies-eng.net



(248) 747-3740



Miami, FL 33014



<https://ies-eng.net/>

EDUCATION

Doctor of Philosophy (PhD),
Civil Engineering,
Florida International University,
Miami, FL
July 2025

Master of Science (MSc),
Civil Engineering
Wayne State University,
Detroit, MI
January 2017

Bachelor of Science (BSc),
Civil Engineering
Minia University,
Minya, Egypt
January 2013

PROFESSIONAL SUMMARY

A goal-oriented professional traffic engineer with over a decade of demonstrated experience supporting Traffic Signal Control, Timing, Traffic Operations and Safety studies as well as large-scale and complex ITS projects deployment to include Signal Controller, ATMS, ATSC, and CV systems as well as Construction Management. A blend of public and private sector experience provides a unique balance between technical proficiency and clientele relationship management expertise.

SKILLS

- HCS
- TRANSYT-7F
- Excel
- Python Programming
- Systems Engineering Tool for Intelligent Transportation (SET-IT), USDOT
- CORSIM
- Synchro
- SQL
- ArcGIS

WORK HISTORY

May 2023 - Current

IES LLC - Principal

The Principal of IES, I am responsible for a variety of administrative, technical, and marketing tasks to include. Sample technical projects include:

MDC ATMS 3000 Location Project support

- 1- Signal control database migration
- 2- EOR Review of signal timing databases
- 3- Automation tool development
- 4- Testing Candidate Signal Controller Firmware Release

MDC Bus Rapid Transit – South Corridor

- 1- Signal Control Programming
- 2- Preparing signal timing
- 3- Conducting operational testing

October 2023 - April 2025

Palm Beach County - Manager - Traffic Signal Systems

In this position I served as the Traffic Signal Systems manager supervising the operation and maintenance of 1200 signalized intersections in Palm Beach County



Licenses and Registration

Professional Engineer:

Michigan, ID: 6201067342
Florida, ID: PE68010

Professional Traffic Operations
Engineer (PTOE) ID: 4573

IMSA Level III

FDOT Advanced MOT

OSHA 30 Hour

Florida Certified Contract
Manager

PROFESSIONAL AFFILIATIONS

SAE International

Florida Section, ITE

as well as supporting various ITS projects to include:

- SynchroGreen adaptive signal system
- TSP/EVP

June 2021 - May 2023

Yunex Traffic (A Siemens Business) - Senior Traffic Engineer

- Provide support for the design of SCOOT adaptive traffic signal system databases
- The Engineer of Record, in responsible charge for the migration of signal timing databases from legacy BiTrans software to the new SEPAC software. In this role I conduct the following tasks:
 - Review updates to the existing pedestrian and clearance intervals Per FDOT and MUTCD standards.
 - Provide task management and technical direction to a team of six.
 - Analyze unique traffic operations in MDC, and subsequently migrate the operation into Siemens SEPAC controller firmware.
 - Review and test candidate SEPAC firmware releases.
 - Provide TMC support and aid in troubleshooting daily operational issues.

November 2019 - June 2021

FDOT District 4 - Freeway Program Manager

- Supervisor of the freeway operations and Traffic Incident Management sections. Freeway Operations comprises Ramp Signaling and Express Lane operations.

March 2019 - November 2019

Atkins Global Inc. - Senior Traffic Engineer

- Served as CEI for Miami-Dade County Traffic Signals Upgrade: ATMS 300, Miami-Dade County, FL.:
 - System validation and submittal review of ACSLite Adaptive Signal System
 - Review of database conversion from 170 to ATC 2070 Controller
 - Contract Management and Issue Resolution

August 2016 - March 2019

Macomb County Department of Roads - ITS/Traffic Safety Engineer

• Corridor Retiming Program

Conducted signal timing optimization and performance measurement for major County corridors using probe vehicle datasets.

• 2016/2019 Traffic Safety Program Lead

Developed and led Macomb County's Traffic Safety Program. Analyzed crash data using UD-10 reports and ArcGIS for spatial analysis to secure federal funding. Provided technical support for signage review and visibility improvements.

• Connected Vehicle Technology Implementation

Led multiple CV projects including RSU/Wi-Fi sensor deployments and Emergency Vehicle Preemption via CV Technology. Managed procurement, installation, programming, and integration of roadside equipment supporting V2I communications.

June 2014 – August 2016

Essam Gamal Construction, Egypt – Site Engineer

Al Bahnasa Wheat Granary

Site Traffic Engineer responsible for quantity take-offs and quality control as well as other Construction Management duties. Daily tasks include constructability plans reviews, field inspection, engineering plans and resource allocation to include staff and materials.

