

**Education**

- PhD., Computer Engineering, December 2016  
Virginia Tech, Blacksburg, Virginia, USA  
GPA: 3.54, VT-MENA full scholarship.  
- PhD research focused on artificial intelligence and intelligent transportation
- MSc., Computer Engineering, May 2009  
University of Texas at El Paso, El Paso, Texas, USA  
GPA: 3.88, Fulbright full scholarship.  
- Thesis research: Identification of humans based on their gait - designed and implemented using evolutionary algorithms and fuzzy logic
- B.S., Computer Engineering, July 2000  
Cairo University, Egypt  
- Graduation project: Design and implementation of an Internet search engine

**Work Experience Computer and Systems Engineering Dept., Minia University, Egypt.**

Assistant Professor (since May 2017)

- Lectures YouTube channel:  
[https://www.youtube.com/channel/UC-OKKEFibTrF\\_nty4CC\\_N\\_w](https://www.youtube.com/channel/UC-OKKEFibTrF_nty4CC_N_w)
- Classes that I regularly teach:
  - o Software Engineering
  - o Artificial Intelligence
  - o Machine Learning
  - o Discrete Mathematics
  - o Statistics and Probability
  - o C Language Programming
  - o Computer Networks
  - o Operating Systems

**Arab Academy for Science and Technology AASTMT (Aswan Branch)**

Assistant Professor (since Jan 2019)

- Classes that I regularly teach:
  - o Human Computer Interaction
  - o Software Engineering
  - o Discrete Structures
  - o Structure of Programming Languages
  - o Modeling and Discrete Event Simulation

**Virginia Tech Transportation Institute, Blacksburg, VA, USA(Aug 2013 –Dec 2016)**

Research Assistant: Participated in research related to intelligent transportation and autonomous vehicles.

**Computer Engineering Dept., Minia University, Egypt. (Jun 2003 – May 2017)**

Demonstrator and Assistant Lecturer:

- Programming, data structures, object-oriented programming, database management systems, software engineering, and artificial intelligence

**REEM, Cairo, Egypt. (Jul 2002 – Jun 2003)**

Software Engineer:

- Programmed custom handheld devices used by Cairo Electricity Company to collect readings of electric-meters.

**Nahdet-Misir Software House, Cairo, Egypt. (Aug 2000 – May 2002)**

Software Developer:

- Developed a number of educational CDs using Visual C++.
- Designed and implemented a number of ActiveX controls

## Recent Publications

- 1- "Leveraging Cross-view Geo-localization with Ensemble Learning and Temporal Awareness," PLoS ONE, 2023, 18(3): e0283672.  
<https://doi.org/10.1371/journal.pone.0283672>
- 2- "Prediction of Emergency Braking Intention using Machine Learning Models," Journal of Advanced Engineering Trends (JAET), JAET-2208-1222, 2022.
- 3- "Hybrid Pointer Networks for Traveling Salesman Problems Optimization," PLoS ONE, 2021, 16(12): e0260995. <https://doi.org/10.1371/journal.pone.0260995>
- 4- "A Probabilistic Travel Time Modeling Approach based on Spatiotemporal Speed Variations," Communications in Computer and Information Science, 2019, 992, pp. 351–366.
- 5- "Travel Time Modeling using Spatiotemporal Speed Variation and a Mixture of Linear Regressions," 2018 4th International Conference on Vehicle Technology and Intelligent Transport Systems VEHITS 2018, Funchal, Madeira, Portugal, March 2018, pp. 113-120.
- 6- "Intersection Management Using In-Vehicle Speed Advisory/Adaptation, " (Connected Vehicle/Infrastructure University Transportation Center, 2016-08-30).
- 7- "An Intersection Game-Theory-Based Traffic Control Algorithm in a Connected Vehicle Environment," 2015 IEEE 18th International Conference on Intelligent Transportation Systems, Las Palmas, 2015, pp. 343-347.
- 8- "A Fully-Distributed Heuristic Algorithm for Control of Autonomous Vehicle Movements at Isolated Intersections, " International Journal of Transportation Science and Technology, Volume 3, Issue 4, 1 December 2014, Pages 297-309.