#### **CURRICULUM VITAE**

1. Family Name: Yehia Ahmed

2. First Name: Zakaria

3. Date of Birth:11 October 1970

4. Nationality:Egyptian5. Civil Status:Married

6. **Mobile:** 01223384254 **Email:** zyehia2005@yahoo.com

7. Education:

Institution (from month/year – to month/year)	Degree(s) or Diploma(s) obtained:
The American University (2015)	Mini MBA
Cairo University, Egypt. (05/2006 –12/2010)	PhD in Civil Engineering
Cairo University, Egypt. (09/2002 – 02/2006)	MSc in Civil Engineering
Information Technology Institute (ITI), Cairo, Egypt (05/1994-09/1994)	GIS/DBMS Diploma
Electrical Engineering (Communications), Cairo University, Egypt (09/ 1988 – 06/1993)	BSc in Electrical Engineering

8. Language skills:(1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
Arabic	1	1	1
English	2	2	2

- 9. Membership of professional bodies: Member of Egyptian Engineering Syndicate
- 10. Teaching and Research Experience:
  - From October 1998 to present, Teaching Assistant, Faculty of Arts, Geography department, Ain Shams University, Teaching the following courses:

1. GIS 2. GPS 3. DBMS 4.Projects

• From October 2000,

Teaching Assistant, Faculty of Computer and Information, Ain Shams University, Taught the following courses:

1. GIS 2. GPS 3. DBMS 4.Projects

• From October 2001 to 2004,

Teaching Assistant, Faculty of Arts, Geography department, Cairo University, Taught the following courses:

1. GIS 2. GPS 3. DBMS 4.Projects

• From October 2005 to Nov. 2011,

Teaching Assistant, The College of Computing and Information Technology, Arab Academy of Science, Technology and Maritime Transport, Taught the following courses:

1. GIS 2. GPS 3. DBMS 4.Projects

• From January 2012 to June 2012,

Teaching Assistant, The Institute of studying strategy and researching for Nile Basin countries Fayoum University's, Taught the following courses:

### • From January 2018 to Present,

Teaching Assistant, Thebes High Institute of Engineering, Dept. of Civil Eng, Teaching the following subjects:

1. Engineering Surveying 2. Plane Surveying 3. GIS 4. Civil Engineering

#### 11. Other skills:

Operating systems – MS Windows and UNIX,

Applications – MS Office, AutoCAD, SQL Oracle database, MS Access, ArcGIS (ArcView, Server and ArcInfo), Map Objects, Adobe Photoshop, ERDAS IMAGINE, GeoMedia Professional, MS Frontpage, Adobe Dreamweaver, Map Objects, Water Cad / Sewer Cad , ArcSDE

Programme languages—Arc Macro Language (AML), Avenue, C++, SQL, Visual Basic, Visual Basic for Applications, Visual Basic.Net, Erdas Macro Language, Visual Basic Script, HTML, Java, Java Script, PHP, VB.Net

Analysis & Design of several GIS & DBMS projects - GIS & DBMS projects implementation - Supervision of various GIS & DBMS (ORACLE & ACCESS & SQL) Projects - GIS & DBMS Training programs - Supervision of various data conversion activities - Remote Sensing applications (IKONOS, SPOT, Quick Bird) - Production of GIS Database and Digital Maps - Prepare tenders - Prepare offers - Designing Web solutions - DBMS projects implementation (ORACLE & ACCESS & SQL) - SCADA systems analyst - Water Cad, Sewer Cad analyst

## 12. Present position: Independent Consultant

# 13. Years within the firm:--

### 14. Key qualifications:

- More than 25 years of professional experience in GIS/DBMS.
- Extensive experience in UFW/GIS in the implementation of projects for leak detection to reduce water losses.
- Extensive experience in Linking GIS with water network, hydraulic analysis, billing System and hotline.
- Substantial experience as trainer both in Egypt and abroad
- Experiences in developing, designing and implementing projects using ArcGIS, Map Object, and open source GIS software.

## 15. Continuing Education:

Software Engineering Competence Center, Cairo, Egypt (2015)

- Software Project Management
- Requirements Configuration Management

European University (2015)

 Arab and International advisors in the field of investment disputes, contracts for banks, intellectual property, arbitration engineering and petroleum contracts

Information Technology Institute (ITI), Cairo, Egypt (05/1994-09/1994) (GIS/DBMS Diploma)

- Windows Unix Operating System Unix Administration
- Technical writing Documentation
- Modern Database concepts SQL programming
- Visual Basic
- ArcInfo Programming Language ArcView Programming Language
- GIS concepts
- Coordinate systems
- Map projection Datum transformation
- Remote Sensing

- GIS data quality
- GIS data management and analysis
- GIS applications
- Idrisi MapInfo
- Erdas Imagine
- ArcInfo
- AML programming language
- ArcView Avenue
- Open Source GIS Programs

Reference no.1:	Name: Prof. Ahmed Mohamed Hamad Designation: President Organization: British University in Egypt Contact Information-Address; Phone:01005360069; Email: ahmed.hamad@bue.edu.eg;
Reference no.2:	Name: Prof. Mohamed Shawki ElGhazali Designation: Surveying Department, Faculty of Engineering Organization: Cairo University Contact Information-Address; 01222190182
Reference no.3:	Name: Prof. Mostafa Baraka  Designation: Civil Engineering Program Director  Organization:, German University in Cairo,GUC  Contact Information-Address; 01001050408; moustafa_baraka@hotmail.com

# 16. Professional Experience (Selected Assignments)

Date (from –to)	Loca- tion	Company	Position	Description
1/2015 – present	Egypt	Global Geobits Osman Ahmed Osman Group– Egypt	CEO	The role involved:  - GIS / IT Solutions  GGE implements enterprise GIS solutions, including HW & SW delivery and operation, GIS database development & digital mapping, and GIS applications development (Desktop, Web & Mobile applications) as well as GIS enterprise system integration  - IT Solutions  GGE implements integrated IT solutions, including Work Flow Management Systems, Documents Archiving Systems, ERP Systems, AVL & Tracking Systems, as well as Contents Management Systems  - Consultation & Training  GGE offers engineering consultation in various areas ( Surveying, Mapping, GIS, LIDAR, GPS, etc),as well as comprehensive training programs by its highly experienced and certified team members including university professors, and authorized consultants
3/2012 – 12/2014	Egypt	Global Geobits Osman Ahmed Osman Group– Egypt	Technical Manager	The role involved:  - Conducted systems analysis, design and implementation - Managed DBMS, GIS and remote sensing projects - Provided training to clients and in-house personnel - Supervised digital maps production and GIS database development
3/2009 – 2/2012	Egypt	Chemonics International	GIS Consultant and M&E Co- ordinator	USAID Water and Wastewater Sector Support Programme (WWSS). Capacity building for specialists belonging to the Water Losses Department's subsidiaries regarding:  - Equipped GIS department with software and hardware - Provided on-the-job training for the GIS staff on how to implement GIS maps from satellite images and field surveys by using GPS units - Provide instruction on usage of the water balance programme for identifying possible options for leakage and pressure control - Supervised the implementation of GIS/leak detection field work  Capacity Building for specialists belonging to the GIS department's subsidiaries regarding: - Explained the need to develop plans, prepare progress reports and Prepare formal and training materials - Provided guidance on how to implement a plan for UFW programme

Date (from –to)	Loca- tion	Company	Position	Description
8/1998 – 2/2009	Egypt	Global Geobits Osman Ahmed Osman Group– Egypt	Manager of GIS Depart- ment	Engineering services firm specialising in GIS and related technologies with a large international and international client base. The role involved:  - Conducted systems analysis, design and implementation - Managed GIS and remote sensing projects - Provided training to clients and in-house personnel - Supervised digital maps production and GIS database development
10/2001- 12/2002	Egypt & United Arab Emirates	Abu Dhabi Utility Company	GIS Specialist	Utility Management project for Abu Dhabi in Abu Dhabi governorate. Activities involved:  - Implemented registering the water, wastewater network and electric network on GIS system for Abu Dhabi utility company in collaboration with ESRI / Elkhateeb & Almi / Miner & Miner.  - Managed Data Conversion for some maps.  - Adjusting the layout and annotations for the utility maps.
6/2002 — 6/2005	Egypt	Ministry of Water Resources & Irrigation	Junior National DBMS / GIS Specialist	Water Quality Management (WQM) project for the Water Quality Management Unit of the Ministry of Water Resources & Irrigation. Activities involved:  - Cooperated with Dutch international experts and local national experts - Implement some application for (Clearing House Mechanism – permits and violation system – Water Quality System - System of assessment fees for construction of industrial facilities to carry pollutants)
2/1999- 7/2000	Egypt - Cairo	USA, Cambria Water ordinance support Cambria Community Ser- vices District (CCSD), San Luis Obispo country Califor- nia	GIS Specialist	Conversion of parcel boundary information and linking of information to assessor's real data and the development of several queries to support in court defense of the District's water allocation policies. This involved the following:  - Compiled, integrated, and conversed data format from CAD files, parcel data that originally resided on a legacy pick operating system and information from the country Assessor's Office.  - Integrated the resulting data into an initial database framework that was used to support the District's Court argument, and has since served as the basic foundation for the development of other GIS components
3/1999 – 11/1999	Egypt - Cairo	GIS Training Program Ministry of Irriga- tion and Water Resources	GIS Specialist	Performed a training program for the Ministry's Drainage Research Institute personnel covering ArcInfo, ArcView, and Avenue programming language. In particular this involved:  - Introduction to GIS.  - Introduction to ArcView.  - ArcView Extensions.  - Programming with Avenue.

Date (from –to)	Loca- tion	Company	Position	Description
1/1999 – 12/1999	Egypt - Cairo	Bolivia Geographic information infrastructure utility analysis Superintendence de Aguas, in La Paz, Bolivia	GIS Specialist	The Superintendence de Aguas is the organization responsible for managing all water utilities and related concessionaries within Bolivia. The project was intended to demonstrate the application of GIS technology to the management of publicly owned facilities, and for the tracking and valuation of assets that are managed by private concessionaires:  - Manage the staff for Data Conversion for maps.  - Implement Geodatabase.
3/1998 – present	Cairo - Egypt	Ain Shams University, Cairo	GIS Instructor	Faculty of Arts and Faculty of Computer and Science of Egypt third-oldest university serving more than 180,000 students. Activities comprised of:  - Lectured GIS graduate and undergraduate courses - Conducted and supervised GIS research projects - Gave lectures and seminars and participating in workshops
3/1993 – 7/1997	Egypt	Information and Decision Support Center (IDSC), the Cabinet	GIS/DBMS Engineer	Remote sensing projects supervision, training, and supervision of all digital maps production and GIS database development at the company.

#### **Publications:**

"Development and Assessment of Semi-automatic Technique for Object Recognition and Feature Extraction from Digital Maps and Satellite Images", International Journal of Intelligent computing and Information Science, 2008

"Object Recognition in GIS", the paper was presented at the Seventh National GIS Symposium in Saudi Arabia, April 29-May 1, 2012

"GIS Generalization", Coordinates International Magazine, "http://mycoordinates.org/gis-generalization/", November, 2013, the paper was presented at the Eighth National GIS Symposium in Saudi Arabia during 15 – 17 April 2013

"Support System Network Analysis for Emergency Applications", Coordinates International Magazine, "http://www.ieee.org/index.html", The 9th International Conference on Informatics and Systems (INFOS2014) – 15-17 December Operations Research and Decision Support Track, 2014

"GIS in Unaccounted for Water", LAP LAMBERT Academic Publishing, "https://www.morebooks.de/store/gb/book/gis-in-unaccounted-for-water/isbn/978-3-659-95090-2". 2016

# **Degrees Supervised and Awarded:**

"GIS in Public Healthcare as a Decision Support System", College of Computing & Information Technology, Arab Academy for Science and Technology & Maritime Transport, 2015. [Ashraf Ahmed Abdel Rahman Gubara]