

CURRICULUM VITAE

1. **Family Name:** Yehia Ahmed
2. **First Name:** Zakaria
3. **Date of Birth:** 11 October 1970
4. **Nationality:** Egyptian
5. **Civil Status:** Married
6. **Mobile:** 01223384254 **Email:** zyehia2005@yahoo.com
7. **Education:** **ESRI Authorized Instructor (ArcGIS & ArcInfo & ArcView)**

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
Software Engineering Competence Center, Cairo, Egypt (2015)	Software Project Management

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
- **From October 2000 ,**
Teaching Assistant, Faculty of Computer and Information, Ain Shams University
- **From October 2001 to 2004,**
Teaching Assistant, Faculty of Arts, Geography department, Cairo University
- **From October 2005 to Nov. 2011,**
Teaching Assistant, The College of Computing and Information Technology, Arab Academy of Science, Technology and Maritime Transport
- **From January 2012 to June 2012,**
Teaching Assistant, The Institute of studying strategy and researching for Nile Basin countries Fayoum University's
- **From January 2018 to Present,**
Teaching Assistant, Thebes High Institute of Engineering, Dept. of Civil Eng
- **Teaching the following subjects:**
- Engineering Surveying - Plane Surveying - GIS - Civil Engineering – Photogrammetry – GIS – GPS – DBMS – Projects - ArcGIS-ArcInfo - ArcGIS-ArcServer - GIS - Web

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

16. Professional Experience (Selected Assignments)

Date (from –to)	Location	Company	Position	Description
1/2015 – present	Egypt	Global Geobits Osman Ahmed Osman Group– Egypt	CEO	<p>The role involved:</p> <ul style="list-style-type: none"> - GIS / IT Solutions <p>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</p> <ul style="list-style-type: none"> - IT Solutions <p>GGE implements integrated IT solutions, including Work Flow Management Systems, Documents Archiving Systems, ERP Systems, AVL & Tracking Systems, as well as Contents Management Systems</p> <ul style="list-style-type: none"> - Consultation & Training <p>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</p>
3/2012 – 12/2014	Egypt	Global Geobits Osman Ahmed Osman Group– Egypt	Technical Manager	<p>The role involved:</p> <ul style="list-style-type: none"> - 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	<p>USAID Water and Wastewater Sector Support Programme (WWSS). Capacity building for specialists belonging to the Water Losses Department’s subsidiaries regarding:</p> <ul style="list-style-type: none"> - 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 <p>Capacity Building for specialists belonging to the GIS department’s subsidiaries regarding:</p> <ul style="list-style-type: none"> - 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)	Location	Company	Position	Description
8/1998 – 2/2009	Egypt	Global Geobits Osman Ahmed Osman Group– Egypt	Manager of GIS Department	Engineering services firm specialising in GIS and related technologies with a large international and international client base. The role involved: <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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 Services District (CCSD), San Luis Obispo country California	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: <ul style="list-style-type: none"> - Compiled, integrated, and converted 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 Irrigation 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: <ul style="list-style-type: none"> - Introduction to GIS. - Introduction to ArcView. - ArcView Extensions. - Programming with Avenue.

Date (from –to)	Location	Company	Position	Description
1/1999 – 12/1999	Egypt - Cairo	Bolivia Geographic information infrastructure utility analysis Superintendence de Aguas, in La Paz, Bolivia	GIS Specialist	<p>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:</p> <ul style="list-style-type: none"> - Manage the staff for Data Conversion for maps. - Implement Geodatabase.
3/1998 – present	Cairo - Egypt	Ain Shams University, Cairo	GIS Instructor	<p>Faculty of Arts and Faculty of Computer and Science of Egypt third-oldest university serving more than 180,000 students. Activities comprised of:</p> <ul style="list-style-type: none"> - 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.

17. Tasks

- Experience in writing contracts and tenders
- Large experience in formulating and conducting the implementation of organization vision and strategy in complex multi-disciplinary and multi-entity homogeneous and heterogeneous environments.
- Wide scope of expertise in a variety of businesses (Information Systems, e-Government, Organizational Development, Research, Decision Support, and Crisis Management ...) including the vision, planning and implementation.
- Advanced high level Managerial skills at the strategic as well as the execution levels.
- Excellent knowledge of organizational, financial and legislative aspects of organization management.
- Solid IS development management and SW systems analysis, design, architecture and implementation on different platforms. Good knowledge of different hardware on both midrange computers and PC's.
- Deep working experience of International Donors and Organizations policies and procedures
- 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)
- GIS & DBMS programming & customization using Visual Basic, Avenue, AML & VBA
- Production of GIS Database and Digital Maps.
- Prepare tenders.
- Prepare offers.
- Software Development.
- Application Development.
- Hardware Development.
- System Integration.
- Designing Web solutions.
- Assisting with project management tasks
- Business Development.
- Prepare monthly and annual reports.
- Presentation.
- Prepare seminars.
- GIS software trainer.
- Visual basic Trainer.
- Map objects Trainer.
- GIS projects implementation
- DBMS projects implementation (ORACLE & ACCESS & SQL)
- GIS & DBMS Training programs
- Supervision of various data conversion activities
- GIS & DBMS programming & customization using Visual Basic, Avenue, AML

18. GIS Experience (1993-now)

- Supervising different research activities & presenting different lectures and seminars & participating in many workshops in Ain Shams University, Egypt.
- Conducting research in the GIS field in the GIS Diploma, Ain Shams University, Cairo
- Teaching GIS undergraduate and graduate courses in the Faculty of Arts and the Faculty of Computer and Since, Cairo University as well as supervising many GIS graduation projects and master and doctor thesis in Ain Shams University and other institutes and universities.
- Working as a junior national DBMS / GIS specialist for the Water Quality Management (WQM) project for the Water Quality Management Unit, Ministry of Wa-

ter Resources & Irrigation in cooperation with Dutch international experts and local national experts

- Working as a GIS Head manager for Global Geobits – Egypt (1998 –now). The scope of work includes: systems analysis, systems design, systems implementation, GIS and
- Remote sensing projects supervision, training, and supervision of all digital maps production and GIS database development at the company in this period. A list of these projects are given in global projects CV.

19. PROJECTS

- GIS/DBMS for Toshky, Halayeb, and East Ouinat , Ministry of Agriculture, SWERI
- Building a GIS unit, Arab Contractors “Osman Ahmed Osman & Co.”
- GIS for Canal Electric Distributing Company (CEDC), Ministry of Electricity
- GIS/DBMS for DINA Agriculture Investments
- Consultation for Alexandria Water General Authority (AWGA), GTZ, German Technical Assistance
- Integrated Project for the Egyptian Village , Canadian Aid CIDA & Mansoura University
- GIS/DBMS application for project management, Arab Contractors “Osman Ahmed Osman & Co.”
- GIS/DBMS for Portland cement Factory, Arab Contractors “Osman Ahmed Osman & Co.”
- Digital maps production for University Campus, Cairo University
- DBMS for Oscal & Insumat, Osman Group
- GIS/DBMS for the General Organization for Physical Planning
- Restoration of Historical Cairo, Ministry of Culture / ECC
- Digital maps production for Itoshima Peninsula Sustainable Community Planning, Japan
- Salton Sea Database Program University of Redlands, California
- GIS Visualization aid analysis application ,City of Valencia, California
- Cambria Water ordinance support, Cambria Community Services District (CCSD), San Luis Obispo country California
- Geographic information infrastructure utility analysis, Superintendence de Aguas, in La Paz, Bolivia
- GIS for Centex Homes Inc. , Centex Homes, Inland Empire Division, Irvine, California
- Thomas Brothers Maps (TBM), Geonex, USA
- GIS Data for Dar Elhandasa (Elshair & Co.)
- Database Management System (DBMS) for The Engineering Concrete Products Co.
- Training Program for the Ministry of Irrigation and Water Resources
- City Utility & Super-structure Management for Elobour city, Ministry of Housing, Urban Planning, and New Communities
- Harvesting techniques based on rainfall project, Development Research and Technological Planning Center (DRTPC)
- Up-grading of GIS Laboratory, Ministry of Agriculture (DRC)
- DBMS / GIS for Dream Land, Dream Land (Bahgat Group)
- Building a GIS Unit, Center of African Studies
- GIS for Canal Electric Distributing Company (CEDC) (Elsharkia governorate), Ministry of Electricity
- GIS/DBMS ,OpenSoft / MobiNil Telecom Company
- Lease-To-Own data conversion (LTO) Project, Geographic Planning Collaborative (GPC), USA
- GIS Database development of base maps in Nigeria, Dar Elhandasa (Elshair & Co.)
- GIS/DBMS for Greater Cairo
- DBMS / GIS project for Sustainable Development Project , Ismailia Governorate
- GIS for Greater Cairo Region , General Organization for Physical Planning (GOPP)

- Implementation of a DBMS & Establishment GIS Production line, Agricultural Research Center (SWERI)
 - GIS database development, Egyptian Survey Authority (ESA)
 - GIS database development, Assuit Cement Factory, Quality Standards,
 - GIS for Canal Electric Distributing Company (CEDC), (Suez & Port said & Red Sea governorates) , Ministry of Electricity
 - Web Site Development, , Ministry of Interior
 - Integrated Dynamic System for Soil & Agricultural Data Acquisition and Database & Maps Updating Agricultural Research Center (SWERI)
 - GIS for Industrial Zones, Ministry of Industry, the General organization for Industrialization
 - Digital Mapping & GIS Database Development of Alger Major Cities , Orascom Telecom
 - Digital Mapping & GIS Database Development of Algeria City ,Orascom Telecom
 - GIS Database Development & Digital Mapping 1:5000 for Matrouh City, Traffic Authority, Mersa Matrouh / Inotek
 - GIS Health Records System , Ministry of Health / ProcyLab/ QS
 - GIS Dynamic System for Development and updating of GIS City Maps,Agricultural Research Center (SWERI)
 - GIS Dynamic System, GIS Enterprise & Consultation for CEDC, Canal Electrical Distribution Company
 - Crop Area Estimation , ERSS
 - Investment project for Matrouh governorate
 - Behyra Geodatabase (Utilities Network)
 - Agriculture Cadastre project, ESA
 - Property Index Map PIM for Mokattam District
 - Urban Cadastral ElSheick Zayed
 - GIS Urban Cadastral System El Maadi district city
 - GIS Urban Cadastral System New Cairo city
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20. COMPUTER SKILLS:

Platforms

UNIX, Windows

SW PACKAGES

- Microsoft Office
- AutoCAD
- SQL
- Oracle database
- Access database
- ArcGIS ArcInfo
- ArcGIS ArcInfo Extensions
- ArcGIS ArcView
- ArcGIS ArcView Extensions
- Arc SDE
- Map Objects
- Arc IMS
- PhotoShop
- ERDAS IMAGINE
- ILWIS
- CadCorp
- GeoMedia Professional
- Web design (Front page / Dream weaver)
- Map objects

21. Courses

- 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
- Sybase
- Oracle
- Idrisi
- MapInfo
- Erdas Imagine
- ArcInfo
- AML programming language
- ArcView - Avenue - VBA

22. Programming knowledge

- 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

23. 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 (IN-FOS2014) – 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

24. 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]

25. References:

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