



## Tamer Saleh

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🔍 <https://scholar.google.com/citations?user=KAmm5ZkAAAAJ&hl=en>

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🌐 <https://www.linkedin.com/in/tamer-saleh-a80a54143/>

🐙 <https://github.com/Tamer-Saleh>

🏆 <https://www.kaggle.com/tamersaleh>

Born 21 May 1988

**AFFILIATION:** State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, Wuhan, Hubei, China.

**PRESENT POSITION:** PhD.

**OBJECTIVE:** Motivated and accomplished remote sensing researcher with expertise in photogrammetry and remote sensing and focused on disaster mapping such as earthquakes, hurricanes, sea ice monitoring, and damages of cultural heritages and their documentation using earth observation data and computer vision algorithms. Seeking a challenging post-doctoral position within an esteemed research group to contribute to cutting-edge research and advance disaster risk assessment and monitoring, documentation, and management strategies.

### EDUCATIONS

2019 – 2024

#### PhD degree in Photogrammetry and Remote Sensing

State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, China.

- Award the PhD degree in Photogrammetry and Remote Sensing with Excellent results, June 2024.
- Passed the pre-defense with distinction, September 2023.
- Passed the mid-term assessment and proposal defense with distinction.
- Completion of qualifying courses for the doctoral program with a GPA [3.72 out of 4].

2013 – 2018

#### Master's degree in Photogrammetry and Remote Sensing

Geomatics Engineering Department, Faculty of Engineering at Shoubra, Benha University, Cairo, Egypt.

- Completion of qualifying courses for the master program with a GPA [3.1 out of 4]

2007 – 2012

#### Bachelors's degree in Geomatics Engineering

Geomatics Engineering Department, Faculty of Engineering at Shoubra, Benha University, Cairo, Egypt.

- With ranked the first out of 121 students.
- With a cumulative rate of 87% (Excellent) with Honors.
- With GPA [3.5 out of 4].
- Project grade (Excellent with Honor Degree), in different surveying and mapping tracks.

2005 – 2007

#### Diploma in Surveying and Mapping

Institute of Surveying, Irrigation, and Drainage, Giza, Egypt

- With general grade of Excellent 95.3% (1906/2000).

- 2024 **National Science Review**
- Shimaa Holail, **Tamer Saleh**, Xiongwu Xiao, Jing Xiao, Gui-Song Xia, Zhenfeng Shao, Mi Wang, Jianya Gong, Deren Li (2024). Time-series Satellite Remote Sensing Reveals Gradually Increasing War Damage in the Gaza Strip. *National Science Review*, nwae304, <https://doi.org/10.1093/nsr/nwae304>. (SCI-Q1 Top).
- 2024 **ISPRS Journal of Photogrammetry and Remote Sensing**
- **Tamer Saleh**, Xingxing Weng, Shimaa Holail, Chen Hao, Gui-Song Xia (2024). DAM-Net: Flood Detection from SAR Imagery Using Differential Attention Metric-Based Vision Transformers. *ISPRS Journal of Photogrammetry and Remote Sensing*, vol. 212, pp. 440–453, <https://doi.org/10.1016/j.isprsjprs.2024.05.018>. (SCI-Q1 Top).
- 2024 **JAG International Journal of Applied Earth Observation and Geoinformation**
- **Tamer Saleh**, Shimaa Holail, Xiongwu Xiao, Gui-Song Xia (2024). High-precision Flood Detection and Mapping via Multi-Temporal SAR Change Analysis with Semantic Token-based Transformer. *JAG International Journal of Applied Earth Observation and Geoinformation*, vol. 131, pp. 103991, <https://doi.org/10.1016/j.jag.2024.103991>. (SCI-Q1 Top).
- 2024 **IEEE TGRS Transactions on Geoscience and Remote Sensing**
- **Tamer Saleh**, Shimaa Holail, Mohamed Zahran, Xiongwu Xiao, Gui-Song Xia (2024). LiST-Net: Enhanced Flood Mapping with Lightweight SAR Transformer Network and Dimension-wise Attention. *IEEE Transactions on Geoscience and Remote Sensing (TGRS)*, vol. 62, pp. 1–17, Art no. 5211817, [doi:10.1109/TGRS.2024.3397797](https://doi.org/10.1109/TGRS.2024.3397797). (SCI-Q1 Top).
- 2023 **IEEE GRSL Geoscience and Remote Sensing Letters**
- Shimaa Holail, **Tamer Saleh**, Xiongwu Xiao, Deren Li (2023). AFDE-Net: Building Change Detection using Attention-Based Feature Differential Enhancement for Satellite Imagery. *IEEE Geoscience and Remote Sensing Letters (GRSL)*, vol. 20, pp. 1–5, Art no. 6006405, [doi:10.1109/LGRS.2023.3283505](https://doi.org/10.1109/LGRS.2023.3283505). (SCI-Q2).
- 2023 **ICARS 2023 Wuhan Remote Sensing Week**
- **Tamer Saleh**, Shimaa Holail, Zhuohong Li, Gui-Song Xia (2023). Precise Flood Inundation Mapping Using Supervised Machine Learning: Turkish Black Sea Cities Case. In proceedings of ICARS 2023 Wuhan Remote Sensing Week, the 2nd International Conference on Advanced Remote Sensing (ICARS) and the 2023 Wuhan Remote Sensing Week, Wuhan, China, 13-15 October. (Oral Session).
- 2023 **ISPRS Geospatial Week (ISPRS GSW2023)**
- **Tamer Saleh**, Mohamed Zahran, Shimaa Holail, Gui-Song Xia (2023). PDCA-Former: Prior-Diagonal Cross Attention-guided Transformer for Flood Mapping From SAR Imagery: A Case in Khartoum. *ISPRS Ann. Photogramm. Remote Sens. Spatial Inf. Sci.*, X-1/W1-2023, 723–730, <https://doi.org/10.5194/isprs-annals-X-1-W1-2023-723-2023>. **Best Paper Award in the SARcon 2023 Workshop**. ISPRS Geospatial Week (GSW2023), Cairo-Egypt, 02-07, September 2023. (Oral Session). (EI-Q2).
- 2023 **ISPRS Geospatial Week (ISPRS GSW2023)**
- **Tamer Saleh**, Shimaa Holail, Xingxing Weng, Xiongwu Xiao, Gui-Song Xia (2023). Ship Detection in COSMO-SkyMed SAR Imagery Using a Novel CNN-based Detector: A Case Study from the Suez Canal. *ISPRS Ann. Photogramm. Remote Sens. Spatial Inf. Sci.*, X-1/W1-2023, 715–722, <https://doi.org/10.5194/isprs-annals-X-1-W1-2023-715-2023>. ISPRS Geospatial Week (GSW2023), Cairo-Egypt, 02-07, September 2023. (Oral Session). (EI-Q2).

## 2023 ISPRS Geospatial Week (ISPRS GSW2023)

- Shimaa Holail, **Tamer Saleh**, Xiongwu Xiao, Zhenfeng Shao, Haigang Sui, Deren Li (2023). M-AFDE-Net: Novel Deep Learning-based Building Change Detection of Freshly Built Locales from Satellite Imagery in the Nile Valley, Egypt. Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XLVIII-1/W2-2023, 1393–1398, <https://doi.org/10.5194/isprs-archives-XLVIII-1-W2-2023-1393-2023>. ISPRS Geospatial Week (GSW2023), Cairo-Egypt, 02-07, September 2023. (Poster Session). (E1-Q2).

## 2020 EasyChair

- Tamer Saleh (2020). The Automatic Extraction of DEM Using Modified RFM of IKONOS Stereo Imagery (No. 2830). EasyChair.

## 2018 Journal of Geomatics – ISG

- Tamer Saleh, Mohamed Zahran, Ayman Al-Shehaby, and Mahmoud Gomaa, (2018) Performance enhancement of Rational Function Model (RFM) for improved geolocation accuracy of IKONOS stereo satellite imagery. Journal of Geomatics – ISG I Indian Society of Geomatics, Volume 12, No. 1 April 2018.

## WORKSHOPS PROCEEDINGS

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### 2023 4th LIESMARS Open Day

- Tamer Saleh and Gui-Song Xia. Innovations That Shaped My PhD Journey. 4th LIESMARS Open Day, Wuhan University, China, 2023. (Poster Session).

### 2023 4th LIESMARS Open Day

- Shimaa Holail, Xiongwu Xiao, Tamer Saleh. Mastering Excellence: A Showcase of the Master's Accomplishments. 4th LIESMARS Open Day, Wuhan University, China, 2023. (Poster Session).

### 2023 3rd LIESMARS Open Day

- Tamer Saleh, Xingxing Weng, Shimaa Holail, Chen Hao, Gui-Song Xia. Flood Mapping from SAR Imagery Using Transformers. 3rd LIESMARS Open Day, Wuhan University, China, 2023. (Poster Session).

### 2023 3rd LIESMARS Open Day

- Shimaa Holail, Tamer Saleh, Xiongwu Xiao, Deren Li. Building Change Detection using Improved Deep Learning Algorithms for Satellite Imagery. 3rd LIESMARS Open Day, Wuhan University, China, 2023. (Poster Session).

## BRIEF BIOGRAPHY

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### 2019 – 2024 PhD Scholar

State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, China.

### 2018 – 2019 Assistant Lecturer

Geomatics Engineering Department, Faculty of Engineering at Shoubra, Benha University, Egypt.

### 2012 – 2018 Teaching Assistant

Geomatics Engineering Department, Faculty of Engineering at Shoubra, Benha University, Egypt.

## WORK EXPERIENCE

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### Sept. 2018 – 2019 Assistant Lecturer - Full Time

Geomatics Engineering Department, Benha University, Egypt.

- Undergraduate Courses, Correct the Assignments.

October 2018 – 2019 **Assistant Lecturer - Part Time**  
Faculty of Arts, Cairo University, Egypt  
• Introduction to Surveying and Mapping.  
• Training on Total Stations and levels instruments.

February 2018 – May 2018 **Teaching Assistant - Part Time**  
Pyramids Higher Institute for Engineering and Technology, Egypt  
• Introduction to Surveying, Levelling, and Computer Programming for Surveying.  
• Training on Total Stations and levels instruments.

2014 – 2018 **Instructor - Part Time**  
Sun-Survey Company, Egypt  
• Introduction to GPS and Total Stations.

February 2013 – June 2013 **Teaching Assistant - Part Time**  
Technical Institute of Surveying, Egypt  
• Modern Surveying Instruments, Surveying Computations, and Computer Programming for Surveying.

September 2012 – August 2018 **Teaching Assistant - Full Time**  
Geomatics Engineering Department, Benha University, Egypt.  
• Undergraduate Courses, Correct the Assignments.

## TEACHING EXPERIENCE

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2012 – 2018 **Assistant Lecturer - Full Time**  
Geomatics Engineering Department, Faculty of Engineering at Shoubra, Benha University, Egypt.  
• SUR421–Advanced Photogrammetry.  
• SUR411-Photo Interpretation and Remote Sensing.  
• SUR412–Geographical Information System (GIS).  
• SUR422–Advanced Geodesy (GPS).  
• SUR443–Digital Terrain Modeling (DTM).  
• SUR343–Close Range Photogrammetry.  
• SUR344–Hydrographic Surveying.  
• SUR311–Photogrammetry (2-A) & SUR321–Photogrammetry (2-B).  
• SUR212-Photogrammetry (1-A) & SUR222–Photogrammetry (1-B).  
• SUR211–Surveying and Mining.  
• SUR313–Theory of Errors & Adjustment Computations.  
• SUR314–Map Projection.  
• SUR224–Computer Applications.  
• SUR124–Engineering Geology (Geologic Maps).  
• SUR111–Surveying (1-A) & SUR121–Surveying (1-B).  
• Annual Graduation Project.

2019 – 2024 **TODO**  
• Microwave Remote Sensing.  
• Spatial Statistics and Analysis.  
• Machine Learning and Deep Learning.  
• Research Methodology and Scientific Writing.  
• Digital Image Processing and Pattern Recognition.  
• Generalized Adjustment.

## AWARDS/CERTIFICATES

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2019 - 2024 **Chinese Government Scholarship**  
• Recipient of the prestigious Chinese Government Scholarship, awarded by the Belt & Road Program, for pursuing doctoral studies in Photogrammetry and Remote Sensing at Wuhan University.

- 2023 **International Training Workshop on BeiDou Technologies**
- Outstanding Award and Certificate during International Training Workshop on BeiDou Technologies and Its Applications in the Belt and Road Countries and Regions, September 12 to September 24, 2023, Beijing, China.
- 2023 **Best Paper Award**
- Best Paper Award at the International Conference ISPRS Geospatial Week "GSW2023", Cairo-Egypt.
- 2023 **ISPRS TIF Award**
- Recipient of the ISPRS TIF Award during participation in the Geospatial Week "GSW2023" conference held in Egypt.
- 2023 **International Geoinformatics Summer School**
- Volunteer Certificate awarded for effective contribution and excellence in volunteer work during the International Geoinformatics Summer School held from July 12th to July 18th, 2023, in Wuhan, China.
  - Certificate of successful course completion earned through participation in a computer vision and digital image processing workshop, held from July 12th to July 18th, 2023, in Wuhan, China.
- 2023 **Hi-Target LIESMARS Internship Certificate**
- For successful completion the Training and Courses of Geo-Spatial Technology and Industry. Organized by Hi-Target Satellite Navigation Technology Co., Ltd., Guangzhou-China, May 23, 2023 to May 26, 2023.
- 2023 **MDPI Certificate**
- Participation in a webinar titled: EO&GEO Series: Remote Sensing for Flood Risk and Hazard Management, May 11, 2023.
- 2022 **Hi-Target LIESMARS Internship Certificate**
- For successful completion the Training and Courses of Geo-Spatial Technology and Industry. Organized by Hi-Target Surveying Instruments Co., Ltd., Wuhan, 09 June, 2022.
- 2022 **Certificate of Completing Image Segmentation**
- Deep Learning with PyTorch : Image Segmentation" an online non-credit course authorized by Coursera Project Network and offered through Coursera, 08 May, 2022. Verify at [coursera.org/verify/774E8JMX5L6V](https://coursera.org/verify/774E8JMX5L6V).
- 2021 **Hi-Target LIESMARS Internship Certificate**
- For successful completion the Training and Courses of Geo-Spatial Technology and Industry. Organized by Hi-Target Surveying Instruments Co., Ltd., Wuhan, 21 April, 2021.
- 2021 **Outstanding International Student Certificate**
- For the third prize of Outstanding International Student Scholarship of Wuhan University in Extra-Curricular Activities and Academic Performance.
- 2021 **STAR LAKE Award**
- For first ranking of Outstanding International Students at LIESMARS, Wuhan University in Academic Performance.
- 2021 **Certificate of Completing Deep Learning 101**
- Detecting Ships from Satellite Imagery" an online non-credit course authorized by Coursera Project Network and offered through Coursera, 15 April, 2021. Verify at [coursera.org/verify/NC82TG5WCZLR](https://coursera.org/verify/NC82TG5WCZLR).

- 2020 **English Geoscience Café (EGSC)**
- Certificate for attending and completing the lecture "On the measurability and reliability of line-infrastructure monitoring with satellite radar interferometry and laser-scanning techniques", English Geoscience Café (EGSC), LIESMARS, Wuhan University, No.: 20201211-47, December, 2020.
- 2020 **Cultural Promoter Award**
- Cultural Promoter Award and Outstanding Cultural Contribution during participation in the International Geo-Informatics Online Summer School. Wuhan University-LIESMARS, 24-31 August 2020.
- 2020 **Qinling Future Scholar Award**
- Qinling future scholar award during participation and speaking in the Global Competence Forum for Young Elite 2020 during the pandemic period. Xidian University, China, June, 2020.
- 2020 **Perfect Student Award**
- Perfect student award in the classroom "Principles of Photogrammetry Course" and preparing an excellent video demo for processing satellite imagery within Photomod, May 2020.
- 2020 **ISPRS Membership Certificate**
- ISPRS Membership Certificate of the International Society for Photogrammetry and Remote Sensing Student Consortium, January, 2020.
- 2019 **IEEE Membership Certificate**
- IEEE Membership Certificate in Geoscience and Remote Sensing Society (GRSS) as a graduate student.
- 2005 – 2018 **Other Awards**
- Award of ethical behavior, by the Golden Jubilee of Surveying Engineering Department, Faculty of Engineering at Shoubra, Benha University, Egypt.
  - Distinguished Thesis Award for M.Sc. dissertation, Surveying Engineering Department, Benha University, Egypt.
  - Award of the Best Teaching Assistant in Surveying Engineering Department, by Shoubra Faculty of Engineering, Egypt.
  - Award of a Good Moral, by the Students of Surveying Engineering Department, Faculty of Engineering at Shoubra, Egypt.
  - Award of Participate in the Quality Requirements at the Department, by Surveying Engineering Department, Faculty of Engineering at Shoubra, Egypt.
  - Award from University City at Shoubra for my Appointment in the College, Egypt.
  - Award in a Good Moral Character, by University City at Shoubra, Egypt.
  - Distinguished Employment of Benha University, by Benha University (Three Graduates from the Department are Selected for this Honor Yearly for Teaching in College).
  - Award for Academic Excellence, by University City at Shoubra, Egypt.
  - Award of Distinguished Students Scholars, by Benha University, Egypt.
  - Award for Academic Excellence, by Student Union (Families Committee), Faculty of Engineering at Shoubra, Egypt.
  - Award of Distinguished Students Scholars in years 2008, 2009, and 2010 respectively, by Benha University, Egypt.
  - Award to get First rank at the County Level, by DAKAHLIYA Governor, Egypt.

## WORKSHOPS/CONFERENCES

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– present

- Attending the International Conference on Geospatial Information Science: Education, Innovation and Applications in November 2022 in Wuhan, China.
- Getting a position (Two-months internship) and join the Hi-Target family for future development. Hi-Target Surveying Instrument Co., Ltd, Guangzhou, China. July-August, 2021. **(canceled due to the global pandemic)**
- Participation in a webinar entitled "Using the right kind of PSInSAR Understanding and selecting the best PSI method". International Academy of Geoinformation, Wuhan University, 17 March, 2021.
- Participation in a Web-Workshop entitled "Oil Spill Monitoring Using SAR". National Authority for Remote Sensing & Space Sciences (NARSS), Egypt, 19-20 January, 2021.
- Participation in the Third Web-Workshop of DAAD Thematic Network 11 Modern Geodetic Space Techniques for Global Change Monitoring" (Project ID: 57421148)". University of Stuttgart, Institute of Geodesy, Germany, 16-18 September, 2020.
- International Online Conference on High Performance Big Data and Intelligent System (HPBD & IS). IEEE computer society, May, 2020.
- International Online Certificate Program "Introduction to Rocket and Satellite Engineering". The Ministry of science and higher education of the Russian Federation, Lomonosov Moscow state University Fundamentals of Remote Sensing, 12-17 April, 2020.
- Participation in the 2019 International Workshop, Joint International Research Laboratory of Modern Geodesy and Geodynamics, Ministry of Education of the People's Republic of China, School of Geodesy and Geomatics, Wuhan University, November 2019.
- Geospatial Technologies Conference, Royal Maxim Palace Kempinski, First Settlement, Cairo, Egypt, Geomakani 2018.
- The 10th International Symposium on Mobile Mapping Technology (MMT), Cairo, Egypt, 2017.
- Geospatial Technologies Conference, Dusit Thani Lake View Cairo Hotel, Cairo, Egypt, Geomakani 2015.
- Extraction of Digital Elevation Data from Satellite Images using IMAGINE Photogrammetry, sponsored by Edge Pro and surveying systems, Faculty of Engineering at Shoubra, Egypt, 2015.
- The Fourth Arab Conference on Astronomy and Geophysics at the National Research Institute of Astronomy and Geophysics, Helwan, Egypt, 2014.
- Inertial Navigation - State of the Art and Future Trends in Mapping and Navigation Applications, Ain Shams University, Cairo, Egypt, 2014.

## ACADEMIC ACTIVITIES

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- 2023 **LIESMARS-Open Day**
- Participating in the LIESMARS Open Day, Poster Session, March 2023, Wuhan University, China.
- 2023 **Editorial Department Leader**
- Leader of the editorial department at the English GeoScience Café (EGSC) organization.
- 2022 **Virtual Summer School**
- Successfully completing the Virtual Summer School in Resilient Cities held by Beijing University of Civil Engineering and Architecture (BUCEA) and ISPRS in July 2022.
- 2021 **IEEE Explore webinar**
- Participate in IEEE Explore webinar about How to publish open access with IEEE to increase the exposure and impact of your research.

## 2019 **Post-Activities**

- Participation in Symposium on Chinese Laws and Regulations for All International Students, LIESMARS, December 2019.
- Participation in the first LIESMARS open house, LIESMARS, Wuhan University, November 2019.
- Visiting Geospatial Enterprises, a subsidiary of Wuhan LJDY Technology company in Wuhan, LIESMARS, Wuhan University, November 2019.
- Visiting Wuhan library (Campus of Information Sciences), LIESMARS, Wuhan University, October 2019.
- A participant member in English Geoscience Café (EGSC), LIESMARS, Wuhan University, October, 2019.
- Participation in Opening Ceremony for new international students, Wuhan University, September, 2019.

## 2014 – 2018 **Pre-Activities**

- Coordinator of the Annual Scientific Conference of the Surveying Engineering Department and Associated Activities of this Conference, Faculty of Engineering at Shoubra, Egypt.
- One of Graduation Projects Supervisors in Topographic Surveying and Mapping for a Period of 8 Weeks/Year, Surveying Engineering Department, Egypt.
- Spokesperson and a leader of a Surveying Team in Workshop “Mapping Our Future”, Collage of Girls, Ain Shams University, Egypt, 2017.
- Participate as a Volunteer in the Scientific Trip “Graduation Project”, Collage of Arts, Menoufia University, Egypt, 2015.
- Supervisor on the Student’s Activities for Playing Football by El Nasr Sporting Club, Faculty of Engineering, Shoubra, Egypt, 2014-2015.

## **CULTURAL ACTIVITIES**

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### 2023 **Wuhan University Campus Sports Competition**

- Fifth-place award in the 2023 Wuhan University Graduate Football Championship, held in June 2023 as part of the Wuhan University Campus Sports Competition.

### 2021 **Wuhan University**

- Attending a cultural welcome party for international students organized by SIE in January 2023.
- Participating in a football activity competition organized by the university for international students and winning first place in October 2022.
- Participate in the cultural experience activity in Xiangyang and Yichang Cities for 3 days.
- Participate in the cultural experience activity of the traditional Chinese—Lantern Festival.
- Participate in a lunar new year dumpling making activity in front of the dormitory office.
- Participate in an International Cultural Recreation event - Building 3 dormitory, Wuhan University.
- Participate in the football activity with LIESMARS team weekly.
- Participation in badminton activity with my research team group weekly.



## PRACTICAL EXPERIENCE ACTIVITIES

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2014 – 2018

### In the field of Geomatics

- Project Manager at the Center of Engineering Studies and Consultations (CESC), College of Engineering at Shoubra, Benha University. The project involved topographic survey (Matching), Mall of Arabia, 6th of October, Egypt, 2018.
- Training courses for Elaraby Group of Companies and Factories, Egypt as: AutoCAD, Civil 3D, and Surfer, 2018.
- Consultant for surveying works at Mohammed Najib Military Base, Project for the establishment of 1000 greenhouses, Al-Hammam area west of Alexandria, 2017.
- A member in a surveying team for establishment of horizontal and vertical control points at Police Academy, First Settlement, Cairo, Egypt, 2017.
- Supervision on surveying works at Solar Project in Banban, Aswan, Egypt, 2016.
- A member in a surveying team to perform the surveying works of the new runway of the Almaza airport, 2015.
- A member in a surveying team for many projects at Mall Mohamed Bin Zayed, The New Capital. The projects involved topographic survey, designing horizontal and vertical control networks, 2015.
- A member in a surveying team for planning and mapping the Railway level crossing in many locations all over Egypt, 2014-2016.
- Consultant for Sun Survey Company, (Cairo-Egypt), for Photogrammetry, remote sensing, GPS and GIS works, 2014-2017.

## RESEARCH INTEREST

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### Photogrammetric Vision

#### Big Data and Data Science

- Mathematical Modelling of Satellite Imagery.
- Digital Photogrammetry and Computer Vision.
- Remote Sensing and Photo Interpretation.
- Feature Extraction and Change Detection.
- Airborne LiDAR Data Processing and Applications.
- Radar SAR Data Processing.
- Artificial Intelligence and Deep Learning.
- GNSS Receivers.

## SKILLS

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### Computer and Communication

#### Language – Image Processing and GIS – GPS Data Processing

- PYTHON, TensorFlow, PyTorch, OpenCV, SNAP, R, GEE, and MATLAB.
- GDAL, Rasterio, Scikit-learn, and Numpy
- ERDAS Imagine, Imagine Photogrammetry, ENVI, Arc GIS Pro, QGIS, Photo Modeller, PhotoMod, and Agisoft PhotoScan.
- SARPROZ
- Trimble Business Center (TBC), Leica Geo Office (LGO), and RINEX.
- 2D CAD Drawings, AutoCAD CIVIL 3D, Surfer, Global Mapper, and Google Earth Pro.
- LATEX Overleaf, Mendeley, Zotero, GeoAI, and ChatGPT.

#### Surveying Instruments

- Dealing with all surveying instruments (GNSS receivers, Total Stations and Levels).
- Processing all surveying data.
- Photogrammetric Workstations.

### Knowledge of Languages

#### Arabic

- Native language.

#### English

- Very Good speaking, Excellent reading and writing.

#### Chinese

- A little bit.

**Personal Highlights** Able to learn new tasks quickly.  
Highly motivated and a team player.  
Able to work and communicate well with people.

**Interests** Research and Reading.

## ADDITIONAL INFORMATION

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**Marital Status** Married, one child  
Egyptian

**Current Address** State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University. School of International Education (SIE), Fengyuan Area of Humanities and Social Science Campus, Wuhan University, Wuchang district, Wuhan, Hubei province, 430072 P.R. China.

## REFERENCE

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**Mohamed Zahran** Professor at Department of Geomatics Engineering, Faculty of Engineering at Shoubra, Benha University, Cairo, Egypt. A member of the National Scientific Committee for the Promotion of Professors of Public Works Engineering and the Vice-Chair of the committee since September 2022.

**E-mail** mohamed.zahran01@feng.bu.edu.eg

**Gui-Song XIA** Professor at National Engineering Research Center for Multi-media Software, School of Computer Science and Institute of Artificial Intelligence, Wuhan University. Joint Professor at State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, Wuhan, China.

**E-mail** guisong.xia@whu.edu.cn

**Zhenfeng SHAO** Professor at State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, Wuhan, China.

**E-mail** shaozhenfeng@whu.edu.cn

**Xiongwu XIAO** Associate Professor at State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, Wuhan, China.

**E-mail** xwxiao@whu.edu.cn