

# CURRICULUM VITAE



## PROFILE:

**Name** : **khaldoun Said Moh'd Qtaishat**  
**Date of Birth** : 08/04/1967  
**Sex** : Male  
**Marital Status:** Married  
**Address** : Civil and Engineering department, Mutah University  
Karak , Jordan  
P.O . Box 61710  
**Telephone** : (00-962) 065231548  
**Mobile** : (00-962) 0798501211) and (00-962) 0779161738  
**E-mail** : [khaldoun\\_q@hotmail.com](mailto:khaldoun_q@hotmail.com)

## CAREER HISTORY:

**(1/12/2012 – until now):** Working as Associate Professor in the Civil and Environment Engineering Department, Mutah University.

**(30/09/2007 – 1/12/2012):** Working as Assistance Professor in the Civil and Environment Engineering Department, Mutah University.

**(1/9/2011 – 1/9/2012):** Working as a head of the Civil and Environment Engineering Department, Mutah University.

**(1/9/2010 – 1/9/2011):** Working as Dean assistant for industry my duties include; includes all the duties to make a link between the university and factories and industrial companies to provide training for students that helps them to get better opportunities for future careers.

**(2002-2006):** Postgraduate Researcher at the Institute of Engineering Surveying and Space Geodesy, at the University of Nottingham in the United Kingdom, Working in the integration of global position system (GPS) with photogrammetry .

**(1989-2013):** Working as Officer Civil Engineer in the Jordan Army, using many soft wares for designing and planning the big projects in Jordan. I worked as a supervisor and as contractor with these projects.

### **EDUCATION:**

**PhD in the Engineering Surveying and Space Geodesy from The University of Nottingham 2006.**

**MSc. in the Engineering Surveying and Space Geodesy from The University of Nottingham, 2003.**

**BSc. Civil Engineering from Jordan University of Science and Technology, Jordan, 1989.**

### **COMPUTER SKILLS:**

Programming in C and C++.

Microsoft Office.

Programming in Java

UNIX.

Microsoft Windows.

### **RESEARCH INTEREST:**

Civil Engineering, Environmental engineering, Engineering Surveying, Aerial Photogrammetry, Geomatics, Space Geodesy, Aerial Photogrammetry Integration with GPS and Inertial Measurement Unit.

### **PROFESSIONAL MEMBERSHIPS:**

1. Governing body of Association of Jordan Roads.
2. The committee of traffic and roads in Jordanian Engineers Association.
3. American Society of Photogrammetry and Remote Sensing (ASPRS).

## **TEACHING EXPERIENCE:**

Surveying 1

Surveying 2

Surveying 1 Lab

Surveying 2 Lab

Photogrammetry

Photogrammetry Lab

Principles of Remote Sensing

Digital Image Processing

Highway design

Engineering drawing

Satellite Positioning and Applications

Geodetic Positioning and GPS

Geodetic Positioning and GPS Lab

Route and Construction Surveying

Principles of Geodesy

Quantity Surveying and Specification

## **TRAINING EXPERIENCE**

Civil Engineering Drawings, Standards & Codes

Geometric Design of Urban and Rural Road

Road Pavement Design

Road Design Skills

Land Surveying & GPS

Quantity Survey

Civil Engineering for Non-Civil Engineers

Estimating Civil Construction Costs

## **COMPLETE LIST OF PUBLICATIONS OF KHALDOUN QTAISHAT**

### **MONOGRAPH:**

1. Youssef, N. R., Maaitah, O. N., Qtaishat, K. (2012): Soil Stabilization by Lime. The Electronic Journal of Geotechnical Engineering. Volume 17.
2. Qtaishat, K. (2011): Assessing the Performance of Different Direct-Georeferencing with Large Format Digital Cameras. Jordan Journal of Civil Engineering. Volume 5, No. 4.
3. Qtaishat, K. (2011) Assessing the Performance of Different Large Format Digital Cameras by Investigating the Geometric Accuracy and Camera Calibration. Jordan Journal of Civil Engineering. Volume 5, No. 1.
4. Qtaishat, K., Smith, M. J. (2010): Investigation into Self-calibration Methods for the Vexcel UltraCam D Digital Aerial Camera. Journal of Civil Engineering. Volume 4, No. 2.
5. Qtaishat, K., Smith, M., Park, D., Jamieson, A. (2006): Assessing the Performance of Different Direct-Georeferencing strategies. Proceedings of the American Society for Photogrammetry and Remote Sensing, Annual Meeting, Reno, Nevada, May 1-5, 2006.

### **FURTHER PUBLICATIONS:**

A) Publications with peer review process

1. Qtaishat, K. (2013): Extracting Accurate Ground Control Points in Desert Areas by Matching Between Aerial and Satellite Images. Accepted in: Mu'tah Journal for Research & Studies. (publisher's declaration of acceptance enclosed).

B) Publications without peer review process

1. Qtaishat, K., Smith, M., Park, D., Jamieson, A. (2006); IMU and UltraCam D Misalignment Calibration. Proceedings of the American Society for Photogrammetry and Remote Sensing, Annual Meeting, Tampa, Florida, May 1-5, 2006.
  2. Smith, M., Qtaishat, K., Park, D., Jamieson, A. (2006): IMU and Digital aerial camera misalignment calibration. The Calibration and Orientation Workshop. of the EuroSDR Commission 1 and the ISPRS working Group 1/3. Spain.
  3. Smith, M. J., Qtaishat, K., Park, D., and Jamieson, A. (2005): Initial Results from the Vexcel UltraCam D Digital Aerial Camera. ISPRS Hannover Workshop on High resolution Earth imaging for geospatial information Proceedings, Volume XXXVI Part I/W3 ISSN No. 1682-1777.
- K. (2006). EuroSDR Digital Camera Calibration. Report on: UltraCam D Digital Aerial Camera Calibration. EuroSDR Camera Calibration Project 2. Report from the University of Nottingham, May 2006.

**LIST OF THE SELECTED KEY PUBLICATIONS OF KHALDOUN QTAISHAT**

1. Qtaishat, K. (2011): Assessing the Performance of Different Direct-Georeferencing with Large Format Digital Cameras. Accepted in: Jordan Journal of Civil Engineering, Volume 5, No. 4.

[This paper provides an independent investigation into the quality, performance and reliability of the Direct Georeferencing (using in-flight control GPS and IMU systems to measure the exterior orientation parameters) with the new photogrammetric digital airborne camera systems, undertaken as a part of the German Society of Photogrammetry, Remote Sensing and Geoinformation (DGPF)

investigation project for large format digital camera Z/I Imaging DMC and Z/I Imaging large format film camera RMC Top 15. Direct Georeferencing by in-flight GPS/IMU is used in two different concepts; direct georeferencing without using the aerial triangulation, and direct georeferencing using the aerial triangulation and only the automatically measured tie points (integrated sensor orientation). The accuracy of ground check points was investigated in this paper to study the quality of both concepts. The benefits of including in-flight GPS/IMU data within the aerial triangulation are far greater for the large format digital.]

2. Qtaishat, K. (2013): Extracting Accurate Ground Control Points in Desert Areas by Matching Between Aerial and Satellite Images. Accepted in: Mu'tah Journal for Research & Studies (publisher's letter of acceptance attached).

[This paper came out to solve a critical problem which appeared during using SIFT method and other similar existing methods, the problem involved the difficulty of extracting ground control point in specified areas, mainly, deserts areas. The Ministry of Municipal and Rural Affairs in Saudi Arabia requested a solution for this problem, particularly because most of the Saudi Arabia areas are deserts. All of the existing proposed methods failed to handle the problem to extract ground control points in deserts areas. This modified method presents high quality orthorectified products and geometric accuracies of approximately one pixel size. To guarantee that the automatically extracted ground control points from the aerial photos provided by this modified method are on a high level of accuracy, three samples from the data set satellite and aerial images were taken from three different locations in Saudi Arabia.

This new modified method managed to help in handling the problem of extraction of GCP in desert areas which has been an obstacle before. It succeeded to overcome this problem with the modifications done. So it is possible, now, to extract GCP with low cost and less efforts.]

3. Qtaishat, K., Smith, M. J. (2010): Investigation into Self-calibration Methods for the Vexcel UltraCam D Digital Aerial Camera. Accepted in: Jordan Journal of Civil Engineering, Volume 4, No. 2.

[This paper provides an investigation into the camera calibration of a Vexcel UltraCam D digital aerial camera which was undertaken as part of the EuroSDR Digital Camera Calibration project. This paper will present results from two flights flown over a test site at Fredrikstad-Norway using established camera calibration techniques. Furthermore, it proposes an alternative approach. The methodology used in this paper for assessing the camera calibration is based on self-calibration using the Collinearity Equations. The analysis was undertaken in order to try to identify any systematic patterns in the resulting image residuals. By identifying and quantifying the systematic residuals, a new calibration method is proposed that recomputes the bundle adjustment based on the analysis of the systematic residual patterns. The new approach has shown that it has potential but needs further investigation to fully assess its capabilities. Issues such as optimum subdivision of the image would also need to form part of this investigation.