# **Assal Hussein**

assal\_hussein\_eng@uodiyala.edu.iq

Address: Alquds cir, College of Engineering, Baqubah, Diyala 23001, Ph: +964 7713761807

#### **EDUCATION**

## **Ph.D.** Civil Engineering

2019

Colorado State University, Fort Collins, CO

Ph.D. - Structural Engineering

Dissertation title: "Performance Assessment of Simple Blast Wall Systems"

Adviser: Hussam Mahmoud, Paul Heyliger

## **M.Sc.** Civil Engineering

2005

University of Technology, Baghdad, Iraq

Thesis: "Nonlinear Behaviour of Steel Frames under Impact Loads"

Adviser: Eyad Al-Hachamee

# **B.Sc.** Civil Engineering

1999

University of Technology, Al-Rasheed College for Engineering & Science, Baghdad, Iraq

## **RESEARCH INTERESTS**

- Structural Performance under Abnormal Loadings
- Human Injuries from Exposure to Blast Incidents
- Engineering Education
- Evaluation Existing structures
- Social, Health, and Economic Impacts due to Terrorism Activities
- Engineering Education

## WORK EXPIRIENCES

• Graduate Teaching Assistant Training, Colorado State University.

2019

- Student/ IT /Marketing, College of Health and Human Sciences, Colorado State University. 2016-Present
- Design and conducted several blast experiments, Colorado State University May 2016- Sept. 2019
  - Free-air measurement tests.
  - Blast wall tests
  - Animal tissue tests
  - Cannon Blast Pressure test in a Football Stadium.
- Head assistant of the Civil Engineering Dept., University of Diyala, Iraq.
   June 2012 January 2013
- Associate Director of Dept. of Scholarships and Cultural Relations, University of Diyala, Iraq. June 2011. – June 2012.
- Ashour General Constructive Contracting Company, IRAQ, BAGHDAD January 2002 April 2006

COURSEWORK				
Graduate Teaching Assistant Training, Colorado State University.	Fall - 2015			
<ul> <li>At-Risk for University and College Faculty, Colorado State University.</li> </ul>	Fall - 2015			
<ul> <li>Sexual Harassment Prevention for Student Employees, Colorado State University.</li> </ul>	Fall - 2015			
<ul> <li>Computer Programming Course, Diyala University, Iraq.</li> </ul>	Nov. 2006			
<ul> <li>Methods of Teaching Courses, Divala University, Iraq.</li> </ul>	July, 2006			

## **ACTIVITIES & HONORS**

•	Thank you letter, President of Diyala University, Iraq Appreciation and thank you letter, Minster of Higher Education, Iraq Kenneth G. Medearis Scholarship, Colorado State University Jack E. Cermak Wind Engineering Graduate Fellowship, Colorado State University Graduate Teaching Assistantship, Colorado State University International Merit Work-Study, Colorado State University IRAQI Government Postgraduate Fellowship (HCED) Earthquake Research Institute.	Fall,2020 Summer,2020 Fall-2017 Fall- 2015 Fall - 2015 Fall - 2015 2013-2018 2013-Present
•	Earthquake Research Institute.  American Society of Civil Engineers.  American Concrete Institute.	2013-Present 2011-Present 2011-Present

## TEACHING EXPERIENCE

EACHING EATERICE			
Engineering Mechanics II, CE 101, University of Diyala	Spring -2021		
Engineering Mechanics I, CE 101, University of Diyala	Fall -2020		
Senior design project course, University of Diyala	Spring -2020		
Concrete Technology II, CE 207, University of Diyala	Spring -2020		
Engineering Mechanics II, CE 101, University of Diyala	Spring -2020		
Engineering Mechanics I, CE 101, University of Diyala	Fall -2019		
Concrete Technology I, CE 207, University of Diyala	Fall -2019		
Teaching Assistant, Evaluation of Civil Engineering Materials, Colorado State University	Fall- 2016		
Teaching Assistant, Design of Reinforced Concrete Structures, Colorado State University	Spring- 2015		
Teaching Assistant, Evaluation of Civil Engineering Materials, Colorado State University	Fall- 2015		
Teaching Assistant, Design of Reinforced Concrete Structures, Colorado State University	Spring-2016		
	Engineering Mechanics II, CE 101, University of Diyala  Engineering Mechanics I, CE 101, University of Diyala  Senior design project course, University of Diyala  Concrete Technology II, CE 207, University of Diyala  Engineering Mechanics II, CE 101, University of Diyala		

#### WORKSHOPS AND SEMINARS

E-Learning in the Iraqi universities: Necessity and Requirements
 How to write academic CV workshop, University of Diyala
 PostDoctoral RCR workshop-Colorado State University
 Dec. 2019
 Dec.-2018

The Intensive Writing Retreat Weak #1- (https://csuwrites.colostate.edu/intensive-writing-retreats).

- Reflections on Teaching Writing A series of lunchtime conversations
   "The Power of Creativity: Teaching Students to Explore Voices and Identity in their writing."
- A Strategy for Making Lectures More Interactive
- Collaborative Digital Annotation
- Critically Reflective Teaching Practice
- Ethics & Diversity in Community-Based Research and Teaching
- Humanizing The Classroom
- Notice and Respond Assisting Students in Distress
- Reflections on Teaching Writing: A Series of Lunchtime conversations "What a Syllabus? Helping Students Navigate College Writing Expectations."

## POSTER AND PRESENTATION SESSIONS

- School of Biomedical Engineering graduate interview days, Colorado State University. Feb. 2019
- Graduate Student Showcase, Colorado State University.
   Nov. 2016

## **PUBLICATION**

- Hussein, A. (2021). Dynamic Response Spectrum of Multi-Story Shear Frame Subjected to Moderate Ground Motion. Diyala Journal of Engineering Sciences, 14(2), 71-79.
- Blast Protection Wall Systems: A Review of Literature, 16th International Conference on Structures under Shock and Impact. Wit Press. WIT Transactions on The Built Environment, 198, 93-109.
- Hussein, A., Heyliger, P., & Mahmoud, H. (2020). Structural performance of a wood-sand-wood wall for blast protection. *Engineering Structures*, *219*, 110954.
- Hussein, A., Mahmoud, H., & Heyliger, P. (2020). Probabilistic analysis of a simple composite blast protection wall system. Engineering Structures, 203, 109836.
- Hussein, A., Heyliger, P., & Mahmoud, H. (2019). Blast response of a thin oriented strand board wall. *Engineering Structures*, 201, 109835.
- Hussein, A.T., Mahmoud, N.H., Heyliger, P.R. (2019). Numerical Evaluation of Simple Blast Wall System to be used in Developing Countries. Proceedings of the 7th International Conference on Structural Engineering, Mechanics and Computation (SEMC 2019), Cape Town, South Africa, 2–4 September 2019 (2019).
- Hussein, A. T. (2011). Elastic-Plastic non linear behaviors of suddenly loaded structures. *American Journal of Engineering and Applied Sciences*, 4(1).
- Hussein, A. T. (2010). Non-linear analysis of SDOF system under blast load. *European Journal of Scientific Research*, 45(3), 430-437.