1600 Queen Rania St. Amman, 11942, Jordan | Cell: +962-(79)-098-3689 | amer.kloob@yahoo.com

## **Principal Structural Engineer and Project Manager**

# Licensed Professional Engineer of California, USA

E	DUCATION:			
•	Ph.D.:	Civil Engineering/Structures   2011–2015		
	University:	Purdue University   Indiana, USA		
	GPA:	3.9/4		
•	M.Sc.:	Civil Engineering/Structures   2008–2011		
	University:	University of Jordan   Amman, Jordan		
	GPA:	3.9/4		
•	B.Sc.:	Civil Engineering   2003–2007		
	University:	Hashemite University   Alzarqa, Jordan		
	GPA:	3.7/4		
	Major GPA:	3.98/4 (Structures Area)		

### **ENGINEERING EXPERIENCE:**

Licensed Professional Engineer (PE) of California in structures area. License No C90995

- Engineering Department at University of Jordan | Amman, Jordan | 2019 2021
  Director Sample of projects is listed in Page 5.
- KPFF Consulting Engineers | Seattle, USA | 2014 2019
  Principal Engineer Sample of projects is listed in Page 3 and 4.
- KPFF Consulting Engineers | Abu Dhabi, UAE | 2010 2011
  Design Engineer Sample of projects is listed in Page 5.
- KPFF Consulting Engineers | Amman, Jordan | 2007 2010
  Bridge Engineer Sample of projects is listed in Page 3 and 4.

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## TECHNICAL SKILLS:

- Professional in nonlinear static/dynamic analysis of highway and railway bridges.
- Excellent knowledge in the AASHTO LFD & LRFD Bridge Design Specifications, AASHTO LRFD Seismic Guide Specifications, AASHTO Manual for Bridge Evaluation, AASHTO Signs Specifications, Washington State Bridge Design Manual.
- Excellent knowledge in ACI-318 design provisions, BS8110, IBC, UBC, ASCE7, AISC Manual, PCI Handbook.
- Excellent knowledge in the SEAOC and FEMA guidelines for Performance-Based Seismic Engineering.

### AWARDS:

- University of Jordan Scholarship: Granted to distinguished students to pursue their PhD | 2010-2014
- Hashemite University Scholarship: Granted to the first ranked student in every academic year | 2004-2005-2006
- Bridge Engineering Contest:
  3<sup>rd</sup> place | USA (International Contest) | 2011

### **TEACHING EXPERIENCE:**

- University of Jordan | Amman, Jordan | 2019 Present Associate Professor Department of Civil Engineering
- University of Jordan | Amman, Jordan | 2015 2019 Assistant Professor Department of Civil Engineering
- Purdue University | Indiana, USA | 2012 2014
  Teaching Assistant Department of Civil Engineering

### SOFTWARE PACKAGES:

ABAQUS	LS-DYNA	CSiBridge	SAP2000	PG-SUPER
SP-COLUMN	SP-BEAM	LPILE	CONBOX	MathCAD

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#### **SAMPLE OF PROJECTS:**

#### Drydock #6 | Bremerton, WA

Conducting nonlinear analysis of a drydock in the USA. The structure is a reinforced concrete structure that is 1,180 feet long and is about 61 feet deep with a clear width of 180 ft. the structure was modeled using thick type shell elements supported on multi-linear links



representing the soil beneath the slab. The drydock was analyzed for the effect of earthquake forces, ship and submarine loads, and hydrostatic pressure forces.

#### SR 520 Floating Bridge | Seattle, WA

Performing structural design of the new SR 520 floating bridge in Seattle, WA. Live loads due to vehicular and light rail were included in the design with the associated seismic loads.



#### Rainier Avenue Bridge | Seattle, WA

This project was part of the East link project in Seattle. Gravity and seismic evaluations were conducted to assess the effects of placing light rail on this existing structure and identify



structural vulnerabilities. The bridge superstructure is a four-cell, cast-in-place, posttensioned concrete box-girder bridge. The piers consist of two integral intermediate piers and abutment stem walls at each end. The bridge columns were retrofitted with FRP jackets to improve confinement, and external post-tensioning inside the box with deviators were used to strengthen the bridge superstructure.

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#### Boren-Pine Undercrossing Bridge Reanalysis | Seattle, WA



The Pine Bridge is a reinforced concrete box-girder bridge that intersects with another reinforced concrete box-girder bridge to form Boren/Pine undercrossing. Through this job, the grillage analogy method for the analysis of multi cellular structures was applied. Mathematical model for this undercrossing was constructed using SAP2000.

Grand Avenue Park Pedistrian and Utility Bridge | Everett, WA



Design and detailing manager of this 300 ft long, simply supported, steel truss bridge. The bridge carries storm drainage and sewer pipelines across a steep slope, BNSF railroad tracks and West Marine View Drive. The bridge provides also pedestrian access from Grand Avenue Park to the waterfront. The truss is sitting on a grade beam supported by two shafts on one end, and supported by tower building on the other end. The tower houses the elevator and the utility pipes.

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#### Lynnwood Link Extension | Seattle, WA

The Lynnwood Link Extension project provides 8.5-miles of light rail from Seattle's Northgate neighborhood to Lynnwood along the I-5 corridor. Structural design of multiple highway bridges performed in this project with two types of live loads, vehicular and light rail vehicles (LRV). Hunting and centrifugal loads generated from the LRV loads were considered.



#### • JW Marriott Hotel and Spa, Abu Dhabi, UAE

Participating in design and detailing of this project that has a total area of 100,000 m<sup>2</sup>. The project includes 10 highrise buildings surrounded by more than 50 shalets.



### Sheikha Shamsa Al Nahyan Palace, Abu Dhabi, UAE

Participating in design and detailing of this palace that has a total area of 15,000 m<sup>2</sup>. The structural design includes design of slabs, beams, columns, and shear walls. This project featured by using of large spans up to 20m.

#### Grid-Connected 16MWatt Photovoltaic Systems | University of Jordan, Amman

Owner representative and Project Manager of this \$22 Million project at University of Jordan. 16 MWatt PV systems are installed on roof tops (12 MWatt) and car parks (4 MWatt) in 110 sites in total. MEP work and insulations of roof tops are conducted before installing PV systems.

