AYMAN NASIR

PhD in Mechanical Engineering



Personal Information

Full Name Ayman Mohammad Adel Nasir

Date/Place of Birth 16th February 1988, Zarqa, Jordan

Religion Muslim
Gender Male

Nationality Jordanian
Marital Status Married

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Contacts

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CV Objective

Seeking a full-time job in the Mechanical Engineering field as an experienced mechanical engineer in order to invest my study, skills and training experience in practice and to accomplish my company's desired goals.

Education			
2018 to 2023	PhD in Mechanical Engineering, Nonlinear Mechanical Vibrations, Applied Mechanics, University of Sheffield, Sheffield, United Kingdom. Thesis Title: Nonlinear Vibration Analysis Using the Method of Direct Normal Forms.		
2013 to 2017	Master in Mechanical Engineering, Mechanical Vibrations, Applied Mechanics, <u>Very Good GPA</u> , University of Jordan, Amman, Jordan. Thesis Title: Response of Fractionally Damped Beams with Appendages Subjected to a Moving Mass.		
2006 to 2011	Bachelor in Mechanical Engineering, Thermal Power, <u>Very Good GPA</u> . Jordan University of Science and Technology, Irbid, Jordan		
2005 to 2006	General Secondary Education Certification, Scientific Branch, <i>Average 92.5%</i> , King Abdullah II School for Excellence, Zarqa, Jordan.		

Qualifications

- ✓ Willing to learn and work under pressure.
- ✓ Hard working and influent in any working environment.
- ✓ Flexible, multi-tasking and energetic team member.

Languages

- ✓ Arabic(native)
- ✓ English (Excellent in Reading & Writing, Very Good in Speaking)

Work Experience						
No.	COMPANY	JOB TITLE	Period			
1	AL-ZAYTOONAH UNIVERSITY	Lecturer - Mechanical Engineering Department	05/03/2023 - now			
	(Amman, Jordan)					
	ABU HALAWA COMPANY (Zarqa, Jordan)	Operation and After Sales Engineer (Part Time Job)	01/02/2016-01/01/2019			
2	WORKING FIELD	 Helping in production of Air Conditioning Laboratory units and selection of Chillers for domestic and commercial applications. Working in labs to improve the efficiency of air conditioning laboratory units. Preparing operation manuals for Air Conditioning Laboratory units used in vocational training centers and vocational high schools. 				
3	AL-ZAYTOONAH UNIVERSITY (Amman, Jordan)	Laboratory Supervisor in Mechanical Engineering Dept. (Heating & Air Conditioning)	04/09/2011-16/07/2018			
	WORKING FIELD	 Lab Supervisor for the following labs: ✓ Strength of Materials Lab. ✓ Thermodynamics lab. ✓ Heat transfer Lab. ✓ Engineering Measurements lab. ✓ Engineering Drawing (Manual & AutoCAD). ✓ Machine Drawing (Ansys Structure, CREO). ✓ Fluid Mechanics lab. ✓ Mechanical Vibrations lab. Teacher Assistant for the following subjects: ✓ Statics. ✓ Dynamics. ✓ Strength of Materials. ✓ Thermodynamics and Engineering Fluid Mechanics. 				

		 ✓ Heating, Ventilation and Air Conditioning Systems. ✓ Refrigeration Systems ✓ Machine Design. ✓ Mechanical Vibrations. Research Assistant in the following researches: ✓ Performance of Small Size Fuel Cell. ✓ Matlab/Simulink and Fuzzy Modeling of the COP for gas refrigeration cycles. A founding member of the Mechanical engineering committee responsible of foundation and development of the mechanical engineering labs in Al-Zaytoonah University, with the following tasks: ✓ Choosing the suitable devices and machines needed for the mechanical engineering labs, then the determination of specifications for each of these machines, these labs are; strength of materials lab, thermodynamics lab, fluid mechanics lab, heat transfer lab, control lab, measurements lab, electrical machines lab and hydraulics and pneumatics lab, Combustion Lab, Fluids Lab, Manufacturing Possesses Lab, Mechanical Vibrations Lab. ✓ Writing the labs tenders and studying the offers submitted to the engineering faculty from the suppliers. ✓ Receiving, installation, operation and training for each of the previous machines. ✓ Preparing the student manual for each lab mentioned above. ✓ Quality Assurance management for previous labs. 	
4	RINAD ACADEMY CENTER (Zarqa, Jordan)	Private Teaching (Part Time Job)	2009- 2017
	WORKING FIELD	 Private Teacher of the following Subjects: ✓ Mathematics and Physics for high school; ✓ Calculus (101,102) and Physics (101,102) ✓ Statics And Dynamics I have worked as a center administrator with the following tasks: ✓ Scheduling timetable of lectures and students. ✓ Organizing financial issues of the center including teachers' salaries, student's payments and annual expenses. 	

Publications

- A. Nasir, N. Sims, and D. Wagg. Direct normal form analysis of oscillators with different combinations of geometric nonlinear stiffness terms. Journal of Applied and Computational Mechanics, 7:1167–1182, 2021.
- A.M. Nasir, N.D. Sims and D.J. Wagg. Computing backbone curves for nonlinear oscillators with higher order polynomial stiffness terms. In: Papadrakakis, M., Fragiadakis, M. and Papadimitriou, C., (eds.) EURODYN 2020: Proceedings of the XI International Conference on Structural Dynamics. EURODYN 2020: XI International Conference on Structural Dynamics, 23-26 Nov 2020, Athens, Greece. European Association for Structural Dynamics (EASD), pp. 318-334. ISBN 9786188507203, 2020.

A. Nasir, N. Sims, D.J. Wagg. Exploring the Dynamics of Viscously Damped Nonlinear Oscillators via Damped Backbone Curves: A Normal Form Approach. In: Lacarbonara, W., Balachandran, B., Leamy, M.J., Ma, J., Tenreiro Machado, J.A., Stepan, G. (eds) Advances in Nonlinear Dynamics. NODYCON Conference Proceedings Series. Springer, Cham. https://doi.org/10.1007/978-3-030-81162-4 14, 2022.

Training and Courses

I have attended the following training sessions:

- A participant in "Arab 3rd International Conference for Higher Education Quality Assurance", Al-Zaytoonah University of Jordan, Amman, Jordan, April 2013.
- Toefl iBT, Mark 84 / 120, date of exam: Nov. 3rd 2012.
- Hourly Analysis Program (HAP), 30 training hours, Luminous Torches Academy Center, Amman, Jordan, August 2012.
- Fire Fighting Systems, 30 training hours, Luminous Torches Academy Center, Amman, Jordan, July 2012.
- Design of HVAC Systems, 30 training hours, Luminous Torches Academy Center, Amman, Jordan, June 2012.
- Design and selection of HVAC Systems, 15 training hours, Jordan Engineers Association, Zarqa, Jordan, August 2011.
- A committed trainee in International Ceramics Industry, Mafraq, Jordan, from 4th July 2010, to 26th August 2010, where I explored the mechanical engineer work, and practiced in the maintenance department.

I have given the following training session as a main trainer:

- HVAC and refrigeration training course, "Trouble Shooting And Typical Operation Conditions For Commercial Refrigeration", course duration: 40 hours (5 working days)
 Oman Cement Company, Masqat, Oman. From April 17th 2016, to April 21st 2016.
- Refrigeration training course, Jordan Engineers Association, "Industrial and Commercial Refrigeration Systems", course duration: 15 hours, June, 2016.

Key Skills

Well Experienced with computer applications (as a user) including:

- ✓ Microsoft Office (Word, Excel, Access, Power Point, Publisher)
- ✓ Internet (Surfing, Communicating)

Proficient or familiar with a number of engineering programs, including:

- ✓ Auto-Cad (2D & 3D Drawing)
- ✓ Pro-Engineer (3D Drawing, Mechanica, Animation)
- ✓ Creo (3D Drawing, Mechanica, Animation)
- ✓ Abaqus/CAE (FEM and Simulation)
- ✓ Matlab (Engineering Design and formulation)
- ✓ Ansys (3D Drawing, Structure Analysis, Fluid Analysis (Fluent and CFX))
- ✓ Maple (Mathematical Formulation and coding)
- ✓ HAP (Hourly Analysis Program for HVAC systems)
- ✓ Elite Fire (Analysis of Firefighting Systems)
- ✓ StaadPro (Structural Analysis)

References

- ✓ Dr. Mohammad Hamdan Former Dean of the Engineering Faculty in Al-Zaytoonah University of Jordan, Amman, Jordan 00962777498980.
- ✓ Dr. Ibrahim Abu Al-shaikh, University of Jordan, Amman, Jordan 00962795179337.
- ✓ Dr. Mohammad Alkam Jordan University of Science and Technology, Irbid, Jordan-alkam@just.edu.jo
- ✓ Eng. Nimr Abu Halawa Abu Halawa Company, Zarqa, Jordan 00962785325999.
- ✓ Mr. Monther Tayyem -Manager of Rinad Academy Center, Zarqa, Jordan–00962788859096.