

Cover Letter

My name is Zahra Ghasemi Monfared. I am a mechanical engineer and according to many reasons I had, I applied for RIT Master of Science in Mechanical Engineering. Fortunately, I have got admission and I am preparing myself to enter RIT for fall semester.

I have got 40% Merit Scholarship and I am trying to provide the rest of the expenses. This way I received an e-mail which made me familiar with the RIT and I intended to apply for the positions and jobs I could guarantee myself of having enough abilities for doing them.

I will be pleased if I could join this community and develop my social and cultural abilities besides studying in a well-qualified university like RIT.

In the following comes my detailed resume which I think could well explain all my abilities and experiences.

Resume

Zahra Ghasemi Monfared

Personal Information

Surname/ Family Name	Ghasemi Monfared
First Name	Zahra
Gender	Female
Date of Birth	20 th June, 1988
Home Address	No. 10, Aftab Alley, Shahid Baradaran Sabzi street, Jamaran street, Shahid Bahonar street, Tehran, Iran. Postal Code:1977817753
University Address	CAE and CFD Center Department of Mechanical Engineering Iran University of Science and Technology Narmak, Tehran, Iran
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Marital Status	Engaged

Academic Education

- **2006- 2011:** Bachelor of Science in Mechanical Engineering, Iran University of Science and Technology (IUST), Tehran, Iran.
 - Graduated in September 2011
 - GPA: **15.94/ 20** (Among 142 passed credit)
- **2005-2006:** Pre-University School Majoring Mathematics-Physics Field, Distinguished Roshangar School, Tehran, Iran.
 - GPA: **19.36/ 20**
- **2002-2005:** High School Diploma Majoring Mathematics-Physics Field, Farasat High School, Tehran, Iran.
 - GPA: **19.86/ 20**

Research Interests

- Computational Fluid Dynamics (**CFD**)
- Uses of **Renewable Energy** in Reducing Fossil Fuels Consumption
- Developing the concept of **Distributed Renewable Energy Power Plants**
- Energy **Management and Optimization** in Various Types of Buildings
- Gas Turbines
- Fluid Mechanics and Energy Issues

Honors and Awards

- Ranked as one of the Winners (among 27 out of 150 Projects Presented) of the **First National Renewable Energy Award** at the Semi-Final Stage, Iran University of Science and Technology (IUST) and Staff of Developing Renewable Energy Technologies of Science and Technology Vice Presidency, December 2011
- Awarded as one of the Most Hardworking Cooperatives of Student Scientific Society of Mechanical Engineering Department, Iran University of Science and Technology (IUST), September 2011
- Awarded as one of the Most Active Students in Mechanical Engineering Department of Iran University of Science and Technology (IUST), May 2011
- Member and Head of Student Syndicate Union of Mechanical Engineering Department, Iran University of science and technology (IUST), May2007- October 2010
- Establisher and Head of Nations Culture and Language Institute, Iran University of Science and Technology (IUST), May 2007-May 2008
- Ranked Top 30% Among Entrants of BSc Students (Entered in 2006) in Mechanical Engineering at Iran University of Science and Technology with GPA **15.94/20** (while the average G.P.A in my department is about 13/20), 2006- 2011
- Ranked 868 Among More Than 500,000 Participants (First 0.17%) in National Iranian Universities Entrance Exam, 2006
- 1st Rank among Pre-University Students at “Distinguished Roshangar High School”, 2005-2006
- 1st Rank among High School Students at “Farasat High School”, 2002-2005
- Honored as Top Student of Mathematics School for Four Levels, Mathematics School of District One, Tehran Department of Education, Winter 2000- Winter 2001

Research Projects

- Studying and Analyzing Possibilities of Using Renewable Energy in One of the Districts of Tehran (District 22) in order to Reduce Energy Consumption and Costs as the Concept of Renewable Power Plants under the Title of "**ARTA Park: Park of Renewable Energy**", Research Project for the **First National Renewable Energy Award**, Mechanical Engineering Department, Iran University of Science and Technology, [August 2011-February 2012]
- Final thesis in BSc: “Numerical Analysis of Chaotic Flow and Heat Transfer of a Nanofluid in a Periodic C-Shape Channel”, [2011]
 - Advisor: Dr. Seyed Mostafa Hosseinalipour¹, CFD Laboratory

- “Thorough Investigation of Effects of Bypass Ratio in Different Applications of Gas Turbines”, Gas Turbine and Jet Engine Class Project.
Iran University of Science and Technology, Mechanical Engineering Department [Fall 2010].
- Advisor: Dr. Mohammad Akhlaghi²
- “Designing HVAC Systems for a 5-Story Apartment by Carrier Tools and Based on RTS Method”, HVAC Course Project, [Spring 2010]
- Advisor: Dr. N.M. Nouri³
- “Designing Industrial Cooling Store for Keeping Fish and Fruit in Qeshm Island”, Refrigeration and Cold Storage Design Class Project, [Spring 2010]
- Advisor: Dr. Hamid Saffari⁴
- “Studying **Gearless Wind Turbines** Design Points and Their Various Applications”, Thermal Power Plants Class Project [Spring 2010]
- Advisor: Dr. Seyed Mostafa Hosseinalipour¹
- “Studying Chaos Theory in Heat Transfer Enhancement in Shell-and-Tube Heat Exchangers”, Designing Heat Exchangers Class Project, [Fall 2009]
- Advisor: Dr. Sepehr Sanaye⁵
- “Nano Composites Structures and Their Applications in Industrial Processes”, Material Science Class Project, [Spring 2007]
- Advisor: Dr. Faramarz Djavanroodi⁶

Research Experiences

- Research Assistant, Iran University of Science and Technology, CFD Center, Chaos Group, July 2009 – August 2011¹
- Research Assistant, Iran University of Science and Technology, CFD Center, Nanofluids Group, September 2010 – August 2011¹
- Intern, Iran University of Science and Technology, CFD Center, Impinging Jets Group, July 2011-September 2011¹
- Research Member of the First National "**Renewable Energy Award**", Iran University of Science and Technology and Staff of Developing Renewable Energy Technologies of Science and Technology Vice Presidency, April 2011-January 2012⁷

Publications

- ARTA Park; a Cultural and Creative Renewable Energy Park, International Conference on Environmental Crises and its Solutions, Kish International Convention Center, Kish Island, on 13 till 14 February 2013, Accepted
- Laminar Heat Transfer Enhancement Utilizing Nanofluids in a Chaotic Flow, Thermal Science, Submitted

Work Experiences

- Technical Coordinator, **IS Company** (An International Inspection Company), July 2012-Present
- Executive Member of the 3rd National and the 1st International Conference on Composite Characterization, Fabrication and Application, IUST, 18 & 19 December 2012
- Executive Member of the First **National Renewable Energy Award**, Iran University of Science and Technology and Staff of Developing Renewable Energy Technologies of Science and Technology Vice Presidency, April 2011- January 2012⁷
- Training Course, Chassis Designing for Diesel Vehicles like Vans, Trucks or Buses, **Iran Khodro Diesel Co.**, Tehran, Iran, August 2009
- Training Course, Flow Visualization and Doing Setup Tests for a Turbulent Opposing Jet Thermal Behavior, **CFD center**, Iran University of Science and Technology, July 2011-September 2011¹
- Editorial Board Member of **TEKANE Magazine** (The Only Student Magazine in Mechanical Engineering Field at Iran University of science and technology), 2008-2011⁸
- Translator, Translating English texts (General and Academic) to Persian for Students or Other Customers as a Source of Earning Money, 2006-2012

Teaching Experiences

- English Teacher (New Interchange 3) in Nations Culture and Language Institute, Iran University of Science and Technology, September 2011-December 2011
- Teaching Assistant, Physics Course, Roshangar Pre-University School, Tehran, 2006-2008⁹
- Private Teacher, Physics and Mathematics Courses, High School Students, 2006-Present

Language Proficiency

- **English:**
 - **IELTS:** 4 November 2010 (Expired) **Overall: 7.0**
Listening: 8 Reading: 7.5 Speaking: 6.5 Writing: 6.0
 - **IELTS:** 13 October 2012 (Took General Training Mistakenly) **Overall: 7.0**
Listening: 6.5 Reading: 8.5 Speaking: 7 Writing: 6.5
 - **IELTS:** 1 December 2012 (Academic) **Overall: 7.5**
Listening: 7 Reading: 7.5 Speaking: 7.5 Writing: 7
 - **GRE (General):** 20 October 2012
 - ✓ Verbal Reasoning: 147 (Below 32%)
 - ✓ Quantitative Reasoning: 160 (Below 81%)
 - ✓ Analytical Writing: 3.5 (Below 30%)
- **German:** Getting Ready to Take START DEUTSCH 1 Test
- **Persian:** Mother tongue

Computer Skills

- Familiar with **EnergyPlus** and **EQUEST** (Energy Analyzer)
- ANSYS (Flotran)
- Gambit & Fluent
- Mechanical Desktop and CATIA
- Carrier (HVAC Software)
- CoolPack & Refrig (Refrigeration Simulation)
- Proficient in MS Office Software (Microsoft Word, Excel, PowerPoint, Publisher)

Elective Courses

- Energy Auditing in Buildings (Voluntary Course in Sharif University), Autumn 2013
- Central Heating and Ventilations (HVAC), Spring 2010
- Refrigeration and Cold Storage Design, Spring 2010
- Thermal Power Plants, Spring 2010
- Turbo Machinery, Spring 2010
- Gas Turbine and Jet Engine, Fall 2010
- Water Conveyance Systems, Spring 2009
- Heat Exchangers Design, fall 2009

Extra Activities

- Attending the 30th **Seasonal Energy Congress**: Building Architecture, Climate and Energy Optimization, Global Energy Committee and Iran Energy Efficiency Organization, March-2012
- Attending a Voluntary Licensed Course Called "KAB (**K**nowing **A**bout **B**usiness)" to Learn Practical Points of **Entrepreneurship** and Money Making by Employing Innovative Ideas, Scientific Society of Mechanical Engineering Department of Iran University of Science and Technology and Iran Technical and Vocational Organization, May 2011
- Writer and Editor of Social and Cultural Magazines (Pejvak, Kolbeh, CHAT, Daneshgah-e-Emrooz, Moj-e-No, Prochista, Mazraeh, Sahm-e-Ma), Iran University of Science and Technology (The hard copy of the related volumes are available), 2006-2011
- Attending a One-Day Workshop Handled by **EBARA** Company about HVAC Systems and Suitable ones for Today's Economic and Environmental Issues of Energy in Iran, Scientific Society of Mechanical Engineering Department of Iran University of Science and Technology and EBARA Company, December 2010
- Executive Member of the Student Book Fair, Book Club, Iran University of Science and Technology, November 2008
- Attending the First Aids Course in the Iranian Red Crescent Society, Winter 2012.

Interests and Hobbies

- Reading and Learning Modern Energy Management Methods
- Watching Movies and Attending Theater Shows
- Nature Hawking, Mountain Climbing, Playing Volleyball and Riding Bicycle
- Writing Social and literary Articles
- Being in Social Committees and Exchanging Ideas with Different People

References

¹ Hosseinalipour, Seyed Mostafa, Associate Professor, Department of Mechanical Engineering, IUST, Tehran, Iran.

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² Akhlaghi, Mohammad, Assistant Professor, Department of Mechanical Engineering, IUST, Tehran, Iran,

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³ Nouri, Norouz Mohammad, Associate Professor, Department of Mechanical Engineering, IUST, Tehran, Iran,

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⁴ Saffari, Hamid, Assistant Professor, Department of Mechanical Engineering, IUST, Tehran, Iran,

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⁵ Sanaye, Sepehr, Associate Professor, Department of Mechanical Engineering, IUST, Tehran, Iran.

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⁶ Djavanroodi, Faramarz, Assistant Professor, Department of Mechanical Engineering, IUST, Tehran, Iran.

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⁷ Derakhshan, Shahram, Assistant Professor, Department of Mechanical Engineering, IUST, Tehran, Iran.

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⁸ Hosseini Hashemi, Shahrokh, Associate Professor, Department of Mechanical Engineering, IUST, Tehran, Iran.

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⁹ Sanamrad, Sakine, Head Mistress, Roshangar School, Tehran, Iran.

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