CV

Seyed Ali Elahi

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Date of Birth: **25th June 1989**

Education Profile:

2008-2012

- **Bachelor of Mechanical Engineering in Design of Solids** since **February 2008 until February 2012** from **the Yasouj University, Iran**. Degree Percentage Attained = **88.1% (17.23/20), First Class**. BEng dissertation: **Theoretical and experimental investigation of flattening process in the empty and filled metal and composite tubes with different cross-sections** (dissertation grade: 20/20).
- **Master of Mechanical Engineering- Applied Design** since **September 2012 until present, Shiraz University of Technology, Iran.** Courses Degree Percentage Until Now = **90% (18/20), First Class.**

Academic Papers:

Academic Journals:

- **Abbas Niknejad, Seyed Ali Elahi and Gholam Hossein Liaghat,** " Experimental investigation on the lateral compression in the foam-filled circular tubes", **Materials & Design**, Volume 36, April 2012, Pages 24-34. (Status: Published)
- **Abbas Niknejad, Hassan Assaee, Seyed Ali Elahi and Ali Golriz,** " Flattening process of empty and polyurethane foam-filled E-glass/vinylester composite tubes- An experimental study", **Composite structures**, Volume 100, 2013, Pages 479- 492. (Status: Published)
- **Abbas Niknejad, Seyed Mohammad Elahi, Seyed Ahmad Elahi and Seyed Ali Elahi,** " Theoretical and experimental study on the flattening deformation of the square and rectangular metal columns", **Archives of Civil and Mechanical Engineering**. (Status: In Press)
- **Abbas Niknejad and Seyed Ali Elahi,** " Theoretical estimation of the flattening parameters in polyurethane foam-filled tubes with circular cross sections under radial loading", **Marine Structures**. (Status: Under review)

Conference Presentations:

- **Abbas Niknejad and Seyed Ali Elahi,** " Specific Energy Absorption by the Circular Tubes with the Polyurethane Foam-Filler in Flattening Process", 2nd International Academic Conference of Young Scientists " Engineering Mechanics & Transport 2011" (EMT-2011), Ukraine. (Status: Presented)
- **Abbas Niknejad and Seyed Ali Elahi,** " Prediction of the stress-strain diagram of circular tube material based on lateral compression tests", 2nd International Academic Conference of Young Scientists " Engineering Mechanics & Transport 2011" (EMT-2011), Ukraine. (Status: Presented)

- **Abbas Niknejad, Gholam Hosein Liaghat and Seyed Ali Elahi,** " A Theoretical Relation for Predicting the Specific Energy Absorption by the Brazen Circular Tubes in Flattening Process", 3rd International and 12th National Conference on Manufacturing Engineering (ICME2011), Iran. (Status: Presented)
- **Abbas Niknejad and Seyed Ali Elahi,** " Study of lateral load of circular thin-walled tubes during flattening process", 11th International Conference of Iranian Aerospace Society, Iran.(Status: Presented)
- **Abbas Niknejad, Seyed Mohamad Elahi, Seyed Ahmad Elahi and Seyed Ali Elahi,** " Experimental investigation of foam and tube fracture in empty and foam-filled circular tubes", 11th International Conference of Iranian Aerospace Society, Iran. (Status: Presented)
- **Abbas Niknejad, Seyed Ali Elahi, Ali Golriz and Amir Setayesh**, " Study of length and diameter effects on energy absorption behavior of empty and foam-filled metal tubes with fabricated composite layers", 3rd International Conference on Composites: Characterization, Fabrication and Application (CCFA-3), Tehran, Iran. (Status: Presented)
- **Abbas Niknejad, Hassan Assaee, Seyed Ali Elahi and Ali Golriz**, " Lateral compression of polyurethane foam-filled metal tubes with peripheral E-glass/ vinylester composite layers", 3rd International Conference on Composites: Characterization, Fabrication and Application (CCFA-3), Tehran, Iran. (Status: Presented)
- **Abbas Niknejad, Hassan Assaee, Seyed Ali Elahi and Ali Golriz**, " Review of previous theoretical studies on flattening of composite tubes", 3rd International Conference on Composites: Characterization, Fabrication and Application (CCFA-3), Tehran, Iran. (Status: Presented)
- **Abbas Niknejad, Seyed Ali Elahi, Seyed Ahmad Elahi and Seyed Mohamad Elahi,** " Review of previous theoretical studies and introduction of a new relation for flattening of tubes", 12th International Conference of Iranian Aerospace Society, Iran. (Status: Presented)
- **Abbas Niknejad, Seyed Ahmad Elahi, Seyed Mohamad Elahi, Seyed Ali Elahi and Mohamad Mahdi Abedi**, " Axial and Lateral compression tests on empty and foam-filled tubes with circular and rectangular cross-sections", 12th International Conference of Iranian Aerospace Society, Iran. (Status: Presented)

Current projects:

- Publishing a book on flattening type tubular energy absorbers.
- Researching on the ways of increment of energy absorption of tubular energy absorbers.
- Submitting a number of experimental and theoretical papers to ISI journals on flattening of different shapes of metal and composite tubes.
- Inventing a new car bumper upon the researches results. (The car bumper is under review)
- Inventing a new guardrail upon the researches results.

Awards:

- First place between Mechanical Engineering (Applied Design) MSc students entry of September 2012 at Shiraz University of Technology.
- Best researcher of Faculty of Engineering of Yasouj University, 2011.
  (The research office of Yasouj University chose me as the best researcher of the year of Faculty of Engineering among all of the BSc and MSc students of this faculty.)
- Second place between Mechanical Engineering students entry of February 2008 at Yasouj University, 2008-2012.

- Best Diploma grade at Alavi High School, 2006.
- Second place of 7th Young Khwarazmi festival in Fars state (electronic part), 2004-2005.

Professional Experience:

2008-Present

- **Part-time Research Assistant, The State University of Yasouj,** Theoretical and Experimental Investigations on empty and filled metal and composite tubes as energy absorbers, From September 2010-2012.
- **Part-time Teacher, Novin Robotic Society of Shiraz, teaching** Catia engineering package, From March 2010-Present.
- **180 hours working in Iranian Offshore Oil Company at Lavan Island,** summer of 2010.
- **Part-time Teacher Assistant, The State University of Yasouj, teaching** Robotic, From September 2009-February 2010.
- **Part-time Teacher, Novin Robotic Society of Shiraz, teaching** Robotic, From September 2008-September 2009.
- **One of the designers of intelligent postal box for Fars State Post Office.**
  An intelligent postal box designed that could be recognized if it is full or empty by internet.
- **Writing music notes for some of Iranian traditional music composers,** From September 2010-Present.

Technical Skills:

- **Programming Languages: Matlab and C++**
  Matlab has been used in BSc and MSc courses for various projects.
- **Engineering Packages: AutoCAD, Abaqus, Catia, Working Model**
  Catia certificate from Iranian Industrial Management Organization with grade of: 97/100.
  Auto CAD certificate from Iranian Industrial Management Organization with grade of: 100/100.
  Catia, Abaqus and Working Model has been used in BSc and MSc courses for various projects.
  Working with Catia professionally.

Memberships:

- The member of Novin Robotic Society of Shiraz since 2008.
- The member of Saba Music Orchestra, Shiraz, since 2011.
- The member of Music Group of Yasouj University 2011-2012.

Research Interests:

- Analysis Type:
  - Impact Loading
  - Large Deformation
  - Plasticity
  - Energy Absorption Mechanisms

    - Metal Forming
- Material Type:
    - Composites
    - Metals
    - Polymer Foams

References:

- Name Dr. **Abbas Niknejad**
  Position Assistant Professor of Mechanical Engineering Department, Faculty of Engineering, Yasouj University, Yasouj, Iran
  Telephone +98 741 2229889
  Fax +98 741 2221711
  Email Aniknejad@mail.yu.ac.ir

- Name Dr. **Hassan Assaee**
  Position Assistant Professor of Mechanical And Aerospace Engineering Faculty, Shiraz University of Technology, Shiraz, Iran
  Telephone +98 711 7264102
  Fax +98 711 7264102
  Email Assaee@sutech.ac.ir

- Name Prof. **Gholam Hosein Liaghat**
  Position Professor of Mechanical Engineering Department, Faculty of Engineering, Tarbiat Modares University, Tehran, Iran.
  Telephone +98 21 88011368
  Email Ghlia530@modares.ac.ir