

CURRICULUM VITAE

Personal Information

First Name: Sahar E-Mails: saharmahdinia@yahoo.com

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Birth Date: 30, June, 1992 Tel: 09150471077



Researchgate: 

Google Scholar: 

Areas of Interest

- Concrete Technology
- Cement mortar
- Gen Experission Programming (GEP)
- Self Compacting Concrete
- Structural optimization
- Fracture mechanics of concrete
- Project Planning
- Construction materials
- Chemistry of cement

Educational Qualification

2021-Present PhD student of Civil Engineering, Ferdowsi University of Mashhad.

2015-2018 M.Sc. in Structural Engineering, Hakim Sabzevari University, Sabzevar, Iran.

- **Total GPA:** 16.83/20.0 (3.37/4)
- **Thesis title:** Predicting macro properties of mortar before Freeze-Thaw by genetic programming and investigating the Freeze-Thaw on effect of cement strength class for macro and micro-Structure of cement mortar
- **Supervisor:** Dr. Hamid Eskandari-Naddaf, [Hakim Sabzevari University](#).
- **Advisors:** Dr. Rasoul Shadnia, [Hakim Sabzevari University](#).
- **Description:** The most important parameter that has a different effect on macro and micro structre properties is the type and strength of cement. It is difficult to identify the effect of cement strength class and the effect of the materials on the properties of the mortar. In this research, the effect of cement strength class and the ratio of the various component on macro and micro structer of cement mortar properties was studied. experimental study including 54 mix designs with 3 cement strength classes,3 sand to cement ratios and 6 water to cement ratio. To do this, different macro experiments (compressive strength, flexural strength, porosity, air content and degree of saturation, elastic modulus, weight loss percentage) and microstructure (SEM, EDS, and XRD) on compressive and flexural sample before and after freeze and thaw, the results were tested using a wide range of properties on the mortar, and the information obtained from the compressive strength and pore volume of the specimens before freeze and thaw using an artificial intelligence method called the Genetic Expression Programming .

2012-2015 B.Sc. in Civil Engineering, Hakim Sabzevari University, Sabzevar, Iran.

- **Total GPA:** 15.61/20.0 (3.32/4)
- **Thesis title:** Structural modeling with Plexis software
- **Supervisor:** Dr. Gholamreza Tadayonfar, [Hakim Sabzevari University](#).

Publications

- Journal Papers:
- **Sahar Mahdinia**, Hamid Eskandari-Naddaf, Rasoul Shadnia. (2017). [Effect of Main Factors on Fracture Mode of Mortar, A Graphical Study](#). Civil Engineering Journal Vol. 3, No. 10, October, 2017.
 - **Sahar Mahdinia**, Hamid Eskandari-Naddaf, Rasoul Shadnia. (2019). [Effect of cement strength class on the prediction of compressive strength of cement mortar using GEP method](#). Construction & Building Materials, 198 (2019) 27–41.
- Under Preperation Papers:
- **Sahar Mahdinia**, Hamid Eskandari-Naddaf, Mohammad Ghaemi-Fard. Predict the compressive and flexural strength of cement mortar in the vicinity of ion in NaCl Solutions using GEP.
 - Hamid Eskandari-Nadda, Ali Ziaei Nia, **Sahar Mahdinia**, Ali Eskandari-Naddaf & Atiyeh Naddafi. A Software Tool for Dynamic Mix Design Optimization of High Performance Concrete
- Books:
- Eskandari, H. **Mahdinia, S.** (2017). Project Management, Planning and Control. Hakim Sabzevari University, (in Persian).

Academic Teaching and Research Experiences

- Sep 2015- Sep 2019 Lab researcher, [Modern Concrete Technology Labratory](#), Department of Civil Engineering, Hakim Sabzevari University.
- Sep 2017- Jan 2018 Teaching assistant, laboratory of concrete under supervision of Dr. Shadnia, Hakim Sabzevari University
- Jan 2017- Sep 2017 Teaching assistant, laboratory of concrete under supervision of Mr. Tayyebinia, Hakim Sabzevari University
- Sep 2016- Jan 2017 Teacher in concrete-laboratory at Hakim Sabzevari University.

Language Proficiency

- Persian: Native
- English: Intermediate

Computer skills

- Programming Languages: Matlab (Numerical computing software), Minitab (Statistical analysis software)
- Engineering Software: Plaxis (Finite Element Analysis software), Artificial intelligence software (GeneXpro tools)
- Civil Software: Seismostruct (Structural design/analysis software), Etabs (Structural design /analysis software), Safe (Foundation design/analysis software), Sap (Structural design/analysis software), AutoCAD (Architectural/Drawing software).

Project Management: MS Project (Project Portfolio Management software)

References

[Dr. Mohammadreza Tavakkolizadeh, Assistant Professor](#)

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[Dr. Hamid Eskandari-Naddaf, Associate Professor](#)

Affiliation: Department of Civil Engineering, Hakim Sabzevari University, Sabzevar, Iran.

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[Dr. Rasoul Shadnia, Assistant Professor](#)

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