

"CURRICULUM VITAE"

Erfan Goharian

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Summary

- 8+ years of research and study in water engineering, and 4+ years of teaching water related courses, research team leaderships, and mentoring 6 students and co-advisor of a master student.
- 10+ publications in peer-reviewed journals and conference proceedings, 30+ presentations in International conferences.
- Best national master thesis in engineering field in Iran (2012), outstanding paper in J. Paul Riley Student Paper Competition-AWRA (2013), and Eva Nieminski Honorary Graduate Science and Engineering Scholarship (2014).

Research Interest

Integrated Water Resource Management; System Dynamics and Analysis; Climate Change Impact on Water Resources; Hydroinformatics; Stormwater Management.

Education

Ph.D. Civil and Environmental Engineering (Water Resources Management)

University of Utah, Salt Lake City, UT, US, Sep 2012 – present. (GPA: 4.00)

Research: A Novel Performance Assessment of Adaptive Management Approaches and Integrated Water Resource Management

M.Sc. Civil and Environmental Engineering (Water Engineering)

University of Tehran, Tehran, Iran, Sep 2009 – Jan 2012. (GPA: 4.00)

Research: Development of a Dynamic Framework to Assess the Urban Water Supply Systems' Readiness

B.Sc. Civil and Environmental Engineering

Ferdowsi University, Mashhad, Iran, Sep 2005 - Sep 2009. (GPA: 3.80)

Current Employment

May 2015 - Present: **Research Assistant, U.S.-Pakistan Centers for Advanced Studies in Water (USPCAS-W)** (*Funded by USAID*)

- Investigating the Water-Energy-Food nexus in Indus River Basin under climate change.
- Research Group Leader including 4 graduate students and 1 undergraduate student
- Collaborating with Colorado State University, U of Nevada-Las Vegas, City University of New York, and Mehran University of Engineering & Technology of Pakistan.

Research Experiences

Aug 2012 – May 2015: **Research Assistant, CI-WATER project** (*Funded by NSF*)

- Developed an integrated water resource management model of Salt Lake City.
- Developed Parleys reservoir management web-tool.
(<http://demo.tethysplatform.org/apps/parleys-creek-management>)
- Member of Access to Data and Computationally Intensive Modeling team.
- Collaborated with Utah State University, Brigham Young University, and University of Wyoming.

May 2013 – May 2014: **Research Assistant, Farmington Bay Water Balance Study** (*Funded by Jordan River-Farmington Bay Water Quality Council*)

- Developed Jordan River Watershed – Farmington Bay Water Budget Model: A Tool for Integrated Water Resources Management
- Leader of project team included 3 PhD students and 2 Master students

Sep 2009 – Sep 2012: **Research Assistant, Institute for the Water & Environment R&D, University of Tehran.**

- Developed preparedness algorithm and framework for urban water disaster management.

Oct 2010 – Jan 2012: **Contributing Author, Institute for the Water & Environment R&D.**

- Contributed to the preparation of book **chapters 6 and 8**, “Hydrology and Hydroclimatology: Principles and Applications” M. Karamouz, S. Nazif, & M. Falahi, CRC Press 2012.

Teaching Experiences

Aug 2015 – Dec 2015: **Co-Instructor, CVEEN 7920, Hydroinformatics.** Department of Civil and Environmental Engineering, University of Utah.

- Added skill of **used just-in-time teaching** to adjust needed lessons based on observed successes and areas of improvement noted in student assignments and classroom exercises.
- Create course materials, and lead instructor for 3 sessions, Help to design course material and facilitate the class at the University of Utah side, Grade projects, homework and exams.

Aug 2014 – Dec 2014: **Co-Instructor, CVEEN 7920, Hydroinformatics.** Department of Civil and Environmental Engineering, University of Utah.

- Design and create course materials, teach and setup the class. Grade projects, homework and exams. Lead facilitator and instructor at the University of Utah side.
- Offered across the University of Utah, Brigham Young University, Utah State University, University of Virginia, and University of Wyoming.
- Feedbacks from Students: Average score (5.67) was much higher than department average (5.21). Feedbacks show excellent knowledge, communication, leadership of University of Utah instructor and his collaboration with other campuses.

Aug 2013- Dec 2013: **Teaching Assistant, CVEEN 7920, Hydroinformatics.** Department of Civil and Environmental Engineering, University of Utah.

- Design and create course materials for 5 sessions at the University of Utah side, setup the class, graded projects, homework and exams.

- Offered across the University of Utah, Brigham Young University, and Utah State University.

Aug 2012 – Dec 2012: **Lab Instructor, CVEEN 3410, Hydraulics.** Department of Civil and Environmental Engineering, University of Utah.

- Taught lab sessions; prepared lab lectures; held review sessions and office hours; graded laboratory assignments, homework and exams.
- Feedbacks from Students: Labs were good in supplementing class materials and interesting to show the actual applications.

Aug 2012 – Dec 2012: **Teaching Assistant, CVEEN 3410, Hydraulics.** Department of Civil and Environmental Engineering, University of Utah.

- Taught lab sessions; prepared lab lectures; held review sessions and office hours; graded laboratory assignments, homework and exams.

Jan 2011 – May 2011: **Teaching Assistant, Hydrology.** Department of Civil Engineering, University of Tehran.

- Held review sessions and office hours; graded homework and final papers, helped to prepare homework and exams.

Grants & Proposals

1. Apr 2015: Incorporating Nutrients into the Farmington Bay Water Budget Model - Jordan River-Farmington Bay Water Quality Council (Co-PI, Lead writer, Awarded - \$28,036.00)
2. Oct 2013: Farmington Bay Water Balance Study - Jordan River-Farmington Bay Water Quality Council (Lead writer, Awarded - \$98,608.00)
3. Oct 2014: Water Infrastructure Sustainability Evaluation (WISE) Center for Modeling Research, USEPA (Contributing writer, Pending - \$3,999,250.00)
4. Sep 2014: Community Resilience Center of Excellence - National Institute of Standards and Technology (NIST) Proposal (Contributing writer, NA - \$19,790,754.00)
5. Nov 2014: Integrated Water Resources Management Model for the Great Salt Lake Basin, Utah Forest, Fire, State Lands (Contributing writer, NA – \$389,854.00)
6. Aug 2014: Student Travel Grants to attend 11th International Conference on Hydroinformatics in New York, CUAHSI. (Lead writer, Awarded)
7. Apr 2015: Travel Grant, Associated Students of the University of Utah (ASUU), University of Utah. (Lead writer, Awarded)
8. Feb 2014: Travel Grant, Global Change & Sustainability Center (GCSC), University of Utah. (Lead writer, Awarded)
9. 2012-14: Several travel Grants from Graduate school and Civil Engineering department, University of Utah. (Lead writer, Awarded)

Honors and Awards

- Aug 2015: **Fundamental of Engineering (FE)**
- Jan 2015: **Eva Nieminski Honorary Graduate Science and Engineering Scholarship**, Intermountain section of the American Water Works Association (AWWA)
- Oct 2012: **Best National Master Thesis in Engineering** (15th festival of the best student thesis, Tehran, Iran)
- Jan 2012: **Outstanding Graduate Student**, Water Engineering, University of Tehran. (Eligible to enter PhD program without national entrance exam.)
- Apr 2014: **Best Students' Paper Award**, J. Paul Riley AWRA Utah Section (9th Annual AWRA-Utah Student Conference, Logan, UT).
- Jun 2014: **Top 5 Most Read Papers**, *Earth Interaction Journal*.
- Nov 2014: Award certification "*Becoming EPSCoR Champions*", NSF communications Workshop.
- Mar 2014: Award certification "*Personal Activity Reporting (PAR)*", University of Utah. (verifies effort for contracts & grants)
- May 2011: Award certification "*Conflict Resolution in Water Resources Management*", Zanjan, Iran.
- 2010-2012: Graduate Research Assistantship, University of Tehran.
- 2013-2015: Graduate Research Assistantship, University of Utah.

Memberships and services

- Active member of EWRI International Participation Committee (ASCE/EWRI) (2014-present):
 - Coordinate international student's participation
 - Coordinate international aspects of the national and international conferences
- Active member of Student Advisory Committee (SAC) – University of Utah (2014-present):
 - Promoting department activities and student organizations
 - Coordinating course evaluations and community outreach activities
- Active member of Technical Committee of Integrated Water Resources Management - American Water Resources Association (AWRA) (2014-present):
 - Extensive collaboration with researchers to share IWRM examples, ideas, methods, lessons learned, and direction for advancement of IWRM
- Board Member of Student Scientific Association of Ferdowsi University of Mashhad (2009-2010)
- Student member of American Society of Civil Engineers (ASCE)

- Active member of Chi Epsilon, The Civil Engineering Honor Society (2014-present)
- Active member of American Water Works Association (AWWA), Water Environment Federation (WEF), and International Association of Hydrologic Sciences (IAHS)
- Journal Manuscript Reviewer of Journals: *Water Resources Planning and Management (JWRPM)*, *Journal of the American Water Resources Association (JAWRA)*, and *Earth Interaction Journal (EIJ)*, *Natural Hazards (Springer)*, *Sustainable Cities and Society (Elsevier)*

Peer-Reviewed Publication

1. **Goharian, E.**, Burian, S., Bardsley, T., and Strong, C. (2015). "Incorporating Potential Severity into Vulnerability Assessment of Water Supply Systems under Climate Change Conditions." *J. Water Resour. Plann. Manage.* , [10.1061/\(ASCE\)WR.1943-5452.0000579](https://doi.org/10.1061/(ASCE)WR.1943-5452.0000579) , 04015051.
2. **Goharian, E.**, Burian, S., Karamouz, M. (2015), "Using Reliability-Vulnerability Joint Probability Distribution to Evaluate the Performance of Water Supply System Performance." *Water Resources Management*. (Under Review)
3. **Goharian, E.**, Burian, S., Lillywhite, J. (2015), "A New Comprehensive Vulnerability Assessment to Integrate Performance of Water Supply Systems under Climate Change Condition." *Journal of Hydrologic Engineering*. (Under Review)
4. Karamouz, M., **Goharian, E.**, Nazif, S. (2013), "Reliability Assessment of the Water Supply Systems under Uncertain Future Extreme Climate Conditions." *Earth Interact.*, Vol. 17, Iss. 20, pp. 1-27. DOI: 10.1175/2012EI000503.1. (*Top 5 Most Read EI Articles - 2013 & 2014*)
5. Karamouz, M., Zahmatkesh, Z, **Goharian, E.**, Nazif, S. (2014), "Combined impact of inland and coastal floods: mapping knowledge base for development of planning strategies." *Journal of Water Resources Planning and Management* 10.1061/(ASCE)WR.1943-5452.0000497 , 04014098.
6. Zahmatkesh, Z., Karamouz, M., **Goharian, E.**, Burian, S. (2014), "Modifications of Urban Stormwater Runoff Caused by Precipitation Changes Based on CMIP5 Climate Projections." *Journal of Hydrologic Engineering*, 10.1061/(ASCE)HE.1943-5584.0001064 , 05014022.
7. Zahmatkesh, Z., Burian, S., Karamouz, M., Tavakol, H., **Goharian, E.** (2014), "Low-Impact Development Practices to Mitigate Climate Change Effects on Urban Stormwater Runoff: Case Study of New York City." *Journal of Irrigation and Drainage Engineering*, 141(1), 04014043.
8. Swain, N. R., Christensen, S., Snow, A., Dolder, H., **Goharian, E.**, Anderson, J., Jones, N.L., Nelson, E.J., Ames, D.P., Williams, G., Burian, S.J. (2015), "The Design and Implementation of an Open Source Platform for Water Resources Web App Development." *Environmental Modelling & Software Journal* (Under Review).

9. York, C., **Goharian, E.**, Burian, S. (2015), "Implication of Watershed and Water Management on Reliability of Water Supply for Downstream Users and Natural System Response." *American Journal of Environmental Science*. (Revised/Submitted)
10. Hansen, C., **Goharian, E.**, Burian, S. (2015), "Develop a Combined Change Factor Methodology (CCFM) for Fine Resolution Climate Change Impact Assessment." *Journal of Hydrology*. (Under Review)
11. **Goharian, E.**, Zahmatkesh, Z., Ghodsi, H. (2015), "Evaluate the Impact of Hydrological Model Parameters' Uncertainty on Water Supply System Performance Using DREAM Algorithm." *Journal of Irrigation and Drainage Engineering*. (Under Review)

Publications in Progress

12. Zahmatkesh, Z., Karamouz, M., **Goharian, E.**, Nazif, S., "System Dynamics Modeling of the Tidal phenomena and interaction between water bodies in New York Harbor." (in Prep)
13. **Goharian, E.**, Burian, S, J., "Integrated Urban Water Resource Management Evaluation Framework to Measure Sustainability of Water Systems for Decision Makers." (in Prep)
14. **Goharian, E.**, Panthail, J. K., Burian, S., "Evaluating the Impact of Urban Air Pollution on Snowmelt Runoff Quantity and Quality and Water Supply System of Salt Lake City, Utah." (in Prep)
15. Abdallah, A., **Goharian, E.**, David Rosenberg, and Steven Burian "A method to Publish and Share Water Management Data through Web Services." (in Prep)

Publications in Proceedings and Presentations *(Presenter is bolded)*

1. **Goharian, E.**, Dawadi, S., Ahmad, S., Burian, S.J., (2015), "A Tale of Two Cities: Comparison of Water Resource Management System Response under Varying Climate and Population Growth in Salt Lake City, UT, and Las Vegas, NV." 2015 UCOWR/NIWR/CUAHSI Conference, 16-18 June, Las Vegas, Nevada.
2. **Goharian, E.**, Burian, S.J., T. Bardsley, C. Strong, J. Niermeyer, L. Briefer, T. Kirkham (2015), "Evaluating Sustainability Tradeoffs of Integrated Urban Water Resources Management Alternatives." 2015 UCOWR/NIWR/CUAHSI Conference, 16-18 June, Las Vegas, Nevada.
3. **Goharian, E.**, Burian, S.J., (2015), "Using Joint Probability Distribution to Develop a Water Supply System Performance Index." 2015 World Environmental and Water Resources Congress, 17-21 May, Austin, Texas.
4. **Goharian, E.**, Burian, S.J., et al. (2015), "Sustainability Evaluation of Decentralized Urban Water Infrastructure Using Systems Modeling." 2015 World Environmental and Water Resources Congress, 17-21 May, Austin, Texas. (Poster)
5. **Goharian, E.**, Burian, S.J. (2015), "A New Metric Integrating Flooding and Water Shortage to Evaluate Vulnerability of Water Systems Subject to Climate Change." AWRA's 2015 Spring Specialty Conference, March 30 – April 1, 2015, Los Angeles, California.

6. **Goharian, E.,** Lillywhite, J., Burian, S.J. (2015), “Reliability Assessment of Salt Lake City Water Supply System by using a Dynamic- Probabilistic Systems Approach.” AWRA's 2015 Spring Specialty Conference, March 30 – April 1, 2015, Los Angeles, California.
7. **Goharian, E.,** Burian, S.J., T. Bardsley, C. Strong, J. Niermeyer, L. Briefer, T. Kirkham (2015), “Climate Change and Scenario Planning utilizing Integrated Water Resource Management Modeling: Case Study of Salt Lake City.” AWRA's 2015 Spring Specialty Conference, March 30 – April 1, 2015, Los Angeles, California.
8. **Tavakoldavani, H.,** Goharian, E., C. Hansen, H. Tavakol-Davani, S. Burian (2015), “Climate Change Impacts on Green Infrastructure Performance in Toledo.” AWRA's 2015 Spring Specialty Conference, March 30 – April 1, 2015, Los Angeles, California. (Poster)
9. **Goharian, E.,** Buchert, M., Hinners, S., Stoker, P. (2014), “Water Flows through the City: Planning Perspectives.” 8th Annual Salt Lake County Watershed Symposium November 19-21, 2014, Salt Lake City, Utah.
10. **Goharian, E.,** Burian, S.J. (2014), “Integrated Urban Water Resources Modeling in a Semi-Arid Mountainous Region using a Cyber-Infrastructure Framework.” HIC2014-11th International Conference on Hydroinformatics, August 17 – 21, 2014, New York City, New York.
11. **Goharian, E.,** Burian, S.J., Strong. C., Panthail, J.K., York, C., Christensen, L.N., Ryder, A. (2014), “Integrated Water Modeling to Determine Climate and Water Management Impacts on Surface Water Resources.” AWRA Spring Specialty Conference on GIS and Water Resources VIII, May 12 – 14, 2014, Salt Lake City, Utah.
12. **Goharian, E.,** Burian, S., Swain, N. R., Christensen, S. (2014), “Web-Based Reservoirs system Management Tool based on Dynamic Simulation for Water Utilities in Salt Lake City, Utah.” 2014 World Environmental and Water Resources Congress, 1-5 Jun, Portland, Oregon.
13. **Goharian, E.,** Burian, S., Lillywhite, J. (2014), “Using Dynamic Simulation to Support Integrated Water Resources Management in Cities.” 2014 World Environmental and Water Resources Congress, 1-5 Jun, Portland, Oregon.
14. **Burian, S.,** Goharian, E., York, C., Tavakol, H., Feng, Y., Zahmatkesh, Z., Panthail, J. K. (2014), “Climate and Urban Water Management Influences on Water Levels in Farmington Bay near Salt Lake City, Utah.” 2014 World Environmental and Water Resources Congress, 1-5 Jun, Portland, Oregon. (Poster)
15. **Zahmatkesh, Z.,** Goharian, E., Burian, S., Tavakol, H., Karamouz, M., (2014), “A Study of Climate Change Impacts on Urban Runoff in a New York City watershed.” 2014 World Environmental and Water Resources Congress, 1-5 Jun, Portland, Oregon.
16. **Panthail, J. K.,** Burian, S., Goharian, E., Houdeshel, D. (2014), “Simulation of the Impact of Urban Air Pollution on Snowmelt Runoff Quantity and Quality in the Parley’s Creek Watershed in Salt Lake City, Utah.” 2014 World Environmental and Water Resources Congress, 1-5 Jun, Portland, Oregon.

17. Zahmatkesh, Z., Karamouz, M., Nazif, S., **Goharian, E.** (2014), "Coastal Floodplain Mapping and Evaluation Using GIS and HEC-GeoRAS Models" 2014 World Environmental and Water Resources Congress, 1-5 Jun, Portland, Oregon.
18. Zahmatkesh, Z., Tavakol, H., Burian, S., Goharian, E., **Karamouz, M.** (2014), "Low Impact Development (LID) Implementation to Mitigate Climate Change Impacts on Urban Runoff." 2014 World Environmental and Water Resources Congress, 1-5 Jun, Portland, Oregon.
19. Zahmatkesh, Z., Karamouz, M., **Goharian, E.** (2014), "Climate Change impact on sea level in New York City." 7th International Perspective on Water Resources & the Environment Conference (IPWE 2014), 8-10 January, 2014, Quito, Ecuador.
20. **Goharian, E.**, Burian, S., Bardsley, T., Kirkham, T. (2013), "Evaluating the reliability of a water supply system based on system dynamics modeling: A Case Study of Salt Lake City, Utah." 2013 World Environmental and Water Resources Congress, 19-23 May, Cincinnati, Ohio.
21. **Bardsley, T.**, Burian, S., Strong, C., Goharian, E., Livneh, B., Wood, A., Kirkham, T., Briefer, L., Miller, P. (2013), "Assessing climate change risks to a municipal water supply: A pilot project incorporating downscaled climate projections, operational hydrologic modeling, and a systems planning model." 2013 CPASW Climate Prediction Applications Sciences Workshop, 23-25 April, Logan, Utah.
22. **Bardsley, T.**, Burian, S., Strong, C., Goharian, E., Kirkham, T., Briefer, L., Livneh, B., Wood, A., Miller, P. (2013), "Assessing climate change risks to a municipal water supply: A pilot project incorporating downscaled climate projections, operational hydrologic modeling, and a systems planning model." 2013 Spring Runoff Conference, 9-10 April, Utah State University, Logan, Utah.
23. **Karamouz, M.**, Goharian, E., Nazif, S. (2012), "Development of a Reliability based Dynamic Model of Urban Water Supply System: A Case Study." ASCE-EWRI's 2012 World Environmental & Water Resources Congress, 20-24 May, 2102, Albuquerque, New Mexico.
24. **Karamouz, M.**, Nazif, S., Goharian, E., Barrow, L. (2012), " Projection of Future Bioclimatic Conditions and Water Demand under Climate Change Impacts." ASCE-EWRI's 2012 World Environmental & Water Resources Congress, 20-24 May, 2102, Albuquerque, New Mexico.
25. **Goharian E.**, Tavakoldavani, H., Goharian, D. (2012), "Comparative Study of Artificial Neural Networks in Water Reservoirs Storage Analysis – Case Study." 9th International Congress on Civil Engineering (9ICCE), 8-10 May, 2012, Isfahan, Iran. (Poster)
26. **Goharian E.**, Tavakoldavani, H., Goharian, D. (2012), "Reservoir storage simulation using artificial neural network models – Lar dam." The first international conference on dams and hydropower, 8-9 February, 2012, Tehran, Iran.
27. **Nazif, S.**, Karamouz, M., Goharian, E. (2012), " Analysis of Future Hydro-climatic Condition in a Semi Arid Region: A Case Study." 5th International Perspective on Water Resources & the Environment Conference (IPWE 2012), 5-7 January, 2012, Marrakech, Morocco.

28. Tavakol-davani, H., **Goharian, E.**, Sahaleh, A. S. (2011), "Integrated water resources management through scenarios based on using alternative water resources, Case study: Gavkhooni basin." International Conference on Integrated Water Resources Management (IWRM), 12-13 October, 2011, Dresden, Germany.
29. **Tavakol-davani H.**, Sahaleh, A. S., Goharian, E. (2011), "Alleviating the Impacts of Climate Change on Water Supply in Arid Areas via Strategies Based on Sustainable Development." ASEAN Australian Engineering Congress, 25-27 July, 2011, Kuching, Malaysia.
30. **Goharian E.**, Tavakol-davani, H., Goharian, D. (2011), "The Most Efficient Artificial Neural Networks for Modeling and Forecasting Water Reservoirs' Storage: Case Study." Second National Conference on Applied Water Resources Research, 18-19 June, 2011, Zanzan Iran. (in Farsi)
31. **Goharian, E.** (2010), "Sustainable Management of Coastal Aquifers." First National Conference of Coastal Water Management, 8-9 December, 2010, Sari, Iran. (in Farsi)
32. **Goharian, E.**, Moghadam, H.R., Raad, M. K. (2008), "Assessment of rough coefficient in flood path." Fourteenth Iranian Student Conference of Civil Engineering, 26-28 August, 2008 Semnan, Iran. (in Farsi)

Invited Talks

- **Goharian, E.** (2015), "Use of GoldSim to Model and Simulate the Integrated Urban Water System of Salt Lake City." San Francisco Public Utilities, April 23, 2015.
- **Goharian, E.** (2015), "Salt Lake City Integrated Water Resources Management (SLC-IWRM) Tool." Salt Lake City Public Utilities, June 17, 2015.
- **Goharian, E.** (2015), "Integrated Water Resource Modeling and Management." iUTAH Coupled Modeling Workshop, February 25, 2015.
- **Goharian, E.**, (2014), "Water Flows through the City: Planning Perspectives." 8th Annual Salt Lake County Watershed Symposium November 19-21, 2014, Salt Lake City, Utah.
- **Goharian, E.**, (2013), "Integrated Water Modeling for Urban Water Management." CI-WATER Summer Institute, June 27, 2013, Salt Lake City, Utah.
- **Goharian, E.**, (2013), "Integrated Climate-Water Modeling." CI-Water All-Hands Meeting Oct-2013, Salt Lake City, Utah.
- **Goharian, E.**, (2013), "Choosing STEM to Solve Real-World Problems." CI-Water All-Hands Meeting, Oct-2013, Salt Lake City, Utah.

Graduate Advisee and Mentees

- **Samira Zeinaddini**, Master, University of Advanced Technology, Kerman, Iran, 2015-present. (*Co-Advisor*)
 - Master thesis: "Analysis of Adaptive Management Policies in Water Supply Systems to Face Future Uncertain Climate Change with Use of Water Evaluation and Planning System Model."

- **Carly Hansesn**, PhD, University of Utah, 2014-present. (*Mentor*)
 - Hansen, C., **Goharian, E.**, Burian, S. (2015), “Develop a Combined Change Factor Methodology (CCFM) for Fine Resolution Climate Change Impact Assessment.” *Journal of Hydrology*. (Under Review)
 - Develop a climate change access tool software package (Undergoing)
 - Member of “Water-Energy-Food Nexus Reading Group” and “Integrated Water Resource Management and System Analysis Reading Group”
- **Ahmed Rafique**, Master, University of Utah, 2015-present. (*Mentor*)
 - Member of USPCAS-W research project team.
- **Nadia Jannath Nishu**, Master, University of Utah, 2015-present. (*Mentor*)
 - Member of USPCAS-W research project team.
- **Chris York**, Master, University of Utah, 2013-2015. (*Mentor*)
 - Master thesis: “Impacts of Large scale Green Infrastructure Implementation and Climate Change on Receiving Water Response in the Salt Lake City Area”
 - York, C., **Goharian, E.**, Burian, S. (2015), “Implication of Watershed and Water Management on Reliability of Water Supply for Downstream Users and Natural System Response.” *American Journal of Environmental Science*. (Revised/Submitted)
 - Member of Farmington Bay Water Balance Study project research team
- **Debadrita Das**, Visiting Scholar from India, University of Utah. (*Mentor*)
- **Giovanni M.R. Santos**, Visiting Scholar from Brazil, University of Utah, 2015. (*Mentor*)

Research Team Leadership

- **U.S.-Pakistan Centers for Advanced Studies in Water (USPCAS-W)**
- **Farmington Bay Water Balance Study**
- **University of Utah and Salt Lake City Department of Public Utilities Collaboration**
- **University of Utah and San Francisco Department of Public Utilities Collaboration**
- **GoldSim Technology Group** (*to test their new software plugin – Water flow module*)
- **Water-Energy-Food Nexus Reading Group**
- **Integrated Water Resource Management and System Analysis Reading Group**
- **Urban Water Group of University of Utah** (*for three months in absence of directors*)

Professional Skills

- **System (Dynamics) Modeling Software:** GoldSim, Stella.
- **Water Modeling and Management Software:** WEAP, SWMM.
- **Hydrologic Modeling:** HBV, Hec-Hms, SRM, HSPF.
- **Hydraulics and Network Modeling:** Hec-Ras, EPANET.
- **Climate Change:** Lars, SDSM.
- **Programming:** MATLAB, Python, Visual Basic, R Studio, Shell Programing.
- **Databases:** MS Access, MySQL, Sqlight.
- **Other Engineering Software:** Lingo, Expert Choice, Auto Cad.
- **Others:** Microsoft Office Word/Power point/Visio, Front Page.

Employment History

- May 07 – May 09: **Project supervisor - Part time**, Mashhad Sazeh International Construction Company, Mashhad, Iran.

Language Competencies

- Professional working proficiency in English / Native fluency in Persian (Farsi)