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Amir Jalali Movahed

Nationality: Iran
Date of Birth: 1985
Phone number: + [98] 915-1590-729
Birthplace: Mashhad – Northeast of Iran

Research topics:

My research interests are related to simulation of water systems and water qualitative and quantitative management with an emphasis on decision making:

1-Quality and quantity simulation of water resources especially in arid and semi-arid regions
2-Simulating Integrated Water Resources Management (IWRM) using System Dynamics Approach
3-Stochastic Time-Series Analysis and Forecasting
4-Performance Criteria Assessment
5-Developing Effective Reservoir Operation Models

Thesis topic:

My M.Sc. dissertation topic is **(Simulating quality and quantity of surface and groundwater supplies by using a system dynamics approach, (Case study: east of Tehran, Iran))** cooperating with regional water authority in Tehran under the guidance of my supervisor (Prof. Ahmad Abrishamchi).
My thesis was about quality and quantity simulation of surface and groundwater resources in an arid region in Iran (southeast of Tehran). There is a chronic shortage in water resources there and we compare divergent subjects to improve this problem such as inter-basin water transfer, reduce agricultural water allocation, change in water expenses to reduce water consumption etc. Also we achieved appropriate qualitative solutions to enhance water quality of Tehran.

Education:

M.Sc. in Civil Engineering (Water Resources Engineering)
Sharif University of Technology, Tehran, Iran (GPA: 16.06/20) (2010-2012)
B.Sc. in Civil Engineering
Azad University (Mashhad Campus), Mashhad, Iran (GPA: 14.38/20) (2007-2009)
A.D. in Civil Engineering
Azad University (Qaen Campus), Qaen Mashhad, Iran (GPA: 15.70/20) (2004-2007)

Honors and Awards:

1-Membership in the Engineering Organization of Khorasan Razavi,Iran (2012).
2-Membership in North American Lake Management Society (NALMS) (2013).
3-Ranked 55th among more than 700 participants in the Iranian Universities' Entrance Exam for PhD degree (2012).

Professional Experiences and Projects:

2015 until now Kavosh Pay Mashhad Consulting Engineers Co.

Working at Kavosh Pay Mashhad (KPM) - Consulting Water Resources Company. As director of international projects.

2012-2015 Eghbal Lahoori and Binalood Universities

Taught five terms in civil and Landscape engineering department (18 Courses).

2014 Khorasan Razavi Regional Water Authority

Working on a Practical research entitled "Water demand and supply management in Neishaboor basin examining ways to equilibration through water pricing with dynamic simulation" I developed a System Dynamics Simulation Model (SDSM) of Neishaboor (East of Khorasan Razavi) region for discovering effect of increasing price of water to reduce usage and demand also showing effect of this increasing on groundwater of Neishaboor.

2013 Toossab Consulting Engineers Co.

Cooperating in the field of modeling and simulating water resources challenges and problems. On a recent troubleshooting project we worked on a 60 million-cubic-meter reservoir called "Tabarak Dam" that remains almost empty after about 10 years of construction.

2010-2012 Sharif University of Technology

1-Working on my M.Sc. Thesis entitled "Conjunctive Management of Surface and Groundwater for Domestic and Agricultural Demand Using System Dynamics; A Case Study East of Tehran, Iran".

2-Simulating Dez Reservoir to reach an appropriate effective operation policy by means of Vensim software.

3-Dam site selection in Sistan watershed using GIS tools

Computer Skills:

Programming Languages (Matlab, Fortran, VB)
Microsoft Office (Excel, Word, MSP …)
Water Eng. Software (Epanet, Sewer Cad, Hec GMS)
Civil Eng. Software (Etabs, Safe, Auto Cad, …)
Geographic Information System (GIS)
Simulation Software (Vensim)

Publications:

1-**Jalali M. A**, Abrishamchi. A., (2015)," Water Quantity and Quality Modeling in Multi Reservoir and complex urban water systems: Application to the east of Tehran, Iran" Hydrological Sciences Journal.
Status: Under Rewrite

2-Felfelani F., **Jalali M. A**, Zarghami M., (2013), "Simulating hedging rules for effective reservoir operation by using system dynamics: a case study of Dez Reservoir, Iran", Journal of Lake and Reservoir Management. **Status: Published**

3-**Jalali M.A.**, Felfelani F., Khorasani H., (2013),"Simulating Surface and Groundwater Conjunctive Use to Reach Qualitative and Quantitative Improvement in Water Resources by Using System Dynamics (Tehran, Iran)" , National Conference of Water and Wastewater Engineering Sciences, Kerman, Iran.
Status: Presented

4-**Jalali M. A.** Safayi. A., (2012), "Qualitative routing of discharge and TDS in Dez river, National Conference of desert, Tehran University, Iran". **Status: Presented**

Hobbies:

Playing the Guitar, Playing volleyball, Biking