

ALIASGHAR BAZRAFKAN

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Education

2022-now, Ph.D. student of Natural resources management, North Dakota state university. USA.

2010-2012, M.S Natural resources engineering, Yazd University, IRAN, (GPA: 16.93 out of 20)

2008-2010, BSc. Natural resources engineering, Gonbadkavous University, IRAN, (GPA: 17.15 out of 20)

Employment History and projects (10 YEARS)

2022- now, The application of high-throughput phenotyping in pulse crops breeding, ND, US

2014- 2021, **GIS and remote sensing expert, Fars agriculture organization, IRAN**

- Providing agricultural atlas of Fars province with help of remote sensing
- Estimation of wheat, canola, and rice cultivars in Fars province with help of remote sensing
- The application of remote sensing for evapotranspiration map preparation in Fars province
- The application of remote sensing in soil salinity estimation
- The application of remote sensing in locust habitat zoning in Fars province
- The application of remote sensing and GIS in zoning of greenhouses in Fars province
- The estimation of agriculture development levels with help of fuzzy modeling

2012- 2014, **watershed manager, Fars natural resource organization, IRAN.**

- The management of AHMADABAD watershed.
- Zoning of landslide hazard at KHERAMEH district.
- The application of remote sensing in fire risk zoning in Fars forests.
- Select the most appropriate estimate of the probability distribution of rainfall and 24-hour Maximum flood discharges SHYTOOR Basin
- Evaluation of spatial and temporal trends of contaminants to ground water statistics and GIS
- Modeling of surface water and guiding surface flood by SMADA model case study sites of South Pars phases

Licenses

Certified sUAS Remote Pilot, **Federal Aviation Administration.**

Issued July 2022, Expired July 2024

Qualifications

- Application of remote sensing in Agriculture, Fars agricultural organization, Iran, 2020
- Application of value engineering in agriculture, Fars agricultural organization, Iran, 2018
- Application of two-frequency GPS in agriculture, Fars agricultural organization, Iran, 2017

Skills

- Python, ArcGIS Pro, ArcGIS Desktop, ENVI, SNAP, Ecognition, pix4d, DJI Terra, SPSS, Minitab, JMP, Expert choice, Auto cad, Global mapper, GS+, Google earth,
- Microsoft office (word, excel, PowerPoint, access, Visio), Photoshop.

RESEARCH INTERESTS

Machine learning, Precision agriculture, Computer vision, Data mining, Remote sensing, Spatial modeling

Publications

- 1- Harry Navasca, **Aliasghar Bazrafkan**, Mario Morales, Jeong-Hwa Kim , Shailesh Raj Archaya, Josephine Princy Johnson, Andrew Ross, Lisa Piche, Paulo Flores and Nonoy Bandillo, **Low-cost Aerial Imagery and Deep Learning to Estimate Plant Maturity in Field Pea**, ASA, CSSA & SSSA International Annual Meeting - Baltimore, Maryland, NOVEMBER 6-9 **2022**.
- 2- Shirzadifar, A.M., Bajwa, S., Nowatzki, J., **Bazrafkan, A.A. 2020. Field Identification of Weed Species and Glyphosate-Resistant Weeds Based on high-resolution Imagery in Early Growing Season**. Biosystem engineering journal, Volume 200, December 2020, Pages 200-214. Google Scholar: <https://www.sciencedirect.com/science/article/abs/pii/S1537511020302609>
- 3- **Bazrafkan, A. A.**, Ekhtesasi, M. R., Salehpour, A. **2014**. Evaluation of dunes sediments middle diameter spatial distribution in association to erosive winds direction using geostatistic algorithms (case study: Ashkzar and Khavidak erg in Yazd province). Bull. Env. Pharmacol. Life sci., vol 3 spl issue iii 2014:126-135
- 4- **Bazrafkan, A. A.**, Salehpour, A. **2014**. Fractional management of watersheds by using the ANP, study case: the basin of Khanzenyoon in fars. Bull. Env. Pharmacol. Life sci., vol 3 spl issue iii 2014: 118-125.
- 5- **Bazrafkan, A.A.** Arekhi, J. **2012**. Assessment of watershed sedimentation based on hydrological model using remote sensing techniques and GIS, Seventh Watershed Conference. Golestan University.
- 6- **Bazrafkan, A. A. 2010**. Investigation and calibration of the Krieger coefficient in arid and semi-arid regions, the second conference on water management issues and providing appropriate solutions.
- 7- **Bazrafkan, A. A. 2012**. Application of spatial information system (GIS) in micro-zoning of semi-arid, Seventh Watershed Conference. Golestan University.
- 8- **Bazrafkan, A. A.** Karimian, A.A, Fatahi, a., Arekhi, J,. The investigation of Torkmansahra farmer's economic climate. 4th promoting and learning of agriculture congress, Gorgan, September 1–3 **2012**.
- 9- **Bazrafkan, A. A.** Arekhi, J, the application of remote sensing in sedimentation of the VEZVA basin. 7th watershed management congress, IORESTAN, March 27–30 **2013**.
- 10- **Bazrafkan, A. A.** Arekhi, J, the application of GIS in climatic zoning of semi-arid regions. 7th watershed management congress, IORESTAN, March 27–30 **2013**.
- 11- **Bazrafkan, A. A.** Ekhtesasi, M.R, feasibility study of Justin, INDIA and KOTINE models for estimation of run off value. 7th watershed management congress, IORESTAN, March 27–30 **2013**.
- 12- **Bazrafkan, A. A.** Arekhi, J, the application of AHP model in locating of the best places for flood spreading regions. 7th watershed management congress, IORESTAN, March 27–30 **2013**.
- 13- **Bazrafkan, A. A.** Motevalli, A, Zahedi, E, Arefkhane, S, Strategic attitude towards the nomads of Khorasan province with help of SWOT MODEL. 7th watershed management congress, IORESTAN, March 27–30 **2013**.
- 14- Soleimani, M, **Bazrafkan, A. A.** Malekinejad, H, Arekhi, J, the investigation and calibration of CREAGER coefficient in arid and semi-arid basins. 5th watershed management congress, Shahrekord, jan 22–25 **2010**.
- 15- **Bazrafkan, A. A.** Qualitative routing of wells in Yazd with the help of cluster analysis and factor analysis. 3th climate change international congress, Tehran, February 14–17 **2014**.
- 16- Zahedi, S.E, **Bazrafkan, A. A.** the possibility of using WAKEBY distribution in analyzing average frequency of maximum monthly discharges. 3th climate change international congress, Tehran, February 14–17 **2014**.

COMPILATIONS

- 1- Application of group decision models in natural resources management.2014. Morning expectations publications, **ISBN: 0-02-7685-600-978**.
- 2- The application of remote sensing in precious agriculture, 2020. Jahad publications, **ISBN: 0-00-3423-500-210**.
- 3- The estimation of strategic crop cultivation through remote sensing in Fars province, **ISBN: 978-964-500-037-8**.

Funded Research Project

- The application of high-throughput phenotyping in pulse crops plant breeding, 2022-2026, NDSU, ND
- Estimation of rice cultivars in Gillan Province with help of remote sensing, Ministry of Agriculture of Iran, 2015-2016

Attended Workshops and Training Courses

- Training course on “Family educational rights and privacy act (FERPA)”, 2hr, NDSU, ND, 2022.
- Training course on “GIS (Theoretical and Practical Course)”, 38 hr., Shiraz University, Shiraz, Fars, Iran, spring 2018.
- Training course on “Remote sensing (Theoretical and Practical Course)”, 24 hr., Fars agriculture education and promotion institute, Shiraz, Fars, Iran, spring 2017.
- Training course on “MATLAB”, 18 hr., Fars agriculture education and promotion institute, Shiraz, Fars, Iran, winter 2016.
- Training course on “weather link software”, 6 hr., Fars agriculture education and promotion institute, Shiraz, Fars, Iran, spring 2017.
- Training course on “Value engineering”, 16 hr., Fars agriculture education and promotion institute, Shiraz, Fars, Iran, summer 2017.
- Training course on “Organizational and individual dynamics”, 18 hr., Fars agriculture education and promotion institute, Shiraz, Fars, Iran, spring 2017.
- Training course on “Interpretation of aerial photographs”, 18 hr., Fars agriculture education and promotion institute, Shiraz, Fars, Iran, summer 2018.

REVIEWER

- Effect ability of Watershed Health Index from Data Length, Iranian journal of watershed management science, 10/19/2022
- The effect of preservation in afforested area desert in Fars FARASHBAND, Iranian journal of watershed management science, 05/29/2017

Thesis Advisor

- The application of GIS, AHP and TOPSIS in zoning of landfill, ROSTAM GANJI thesis, ESFAHAN industrial university, 2015.

Achievements:

Rank 5 Master Entrance Exam, 2013

The best Researcher of modern agriculture technology Department in Fars Organization of Agriculture, 2019

References

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