

# Hamed Asadi

MSc Environmental Engineering | Prospective PhD Researcher

Email: [hamed.asadi.env@gmail.com](mailto:hamed.asadi.env@gmail.com)

Website: <https://hamed-asadi.github.io/>



## Research Profile

Quantitative environmental researcher specialising in spatial modelling and data-driven conservation systems. My work integrates GIS-based spatial analysis, species distribution modelling (SDMs), climate scenario assessment (CMIP6), and structured decision-support frameworks to generate decision-relevant insights for biodiversity conservation and environmental management. I develop reproducible R-based analytical workflows for environmental data processing, modelling, and reporting.

## Research Interests

- Spatial environmental modelling and applied geospatial analysis
- Species distribution modelling (SDMs) and climate change impacts
- Climate scenario assessment (CMIP6; SSP pathways)
- Conservation planning and protected area assessment
- Structured spatial decision-support (MCDA) for environmental management

## Education

- **MSc**, Natural Resources Engineering – Environmental Sciences — Isfahan University of Technology, Iran (2013–2016)

Thesis: Evaluating the ecotourism attractions of Abbas Abad Wildlife Refuge

Methods: GIS–MCDA (DANP, OWA), spatial suitability mapping

GPA: 15.88/20   GPA: 6.29/9   | **Thesis Grade: 19.62/20**

- **BSc**, Natural Resources Engineering – Environmental Sciences — University of Guilan, Iran (2009–2013)

Project: Analysis of five production wastes in Songor city

GPA: 15.83/20   GPA: 6.37/9   | **Project Grade: 19/20**

## Publications

Ahmadi, M., Nawaz, M. A., Asadi, H., et al. (2024). Protecting alpine biodiversity in the Middle East from climate change: Implications for high-elevation birds. Diversity and Distributions.

Asadi, H.\*, Soffianian, A., Hemami, M.-R., et al. (2022). A hybrid GIS-OWA and DANP method for the identification and evaluation of ecotourism attractions. *GeoJournal* (Springer). (\*Corresponding author)

## Research Experience

- Climate-driven biodiversity impact assessment using SDM workflows and CMIP6 scenarios.
- Development of GIS-based suitability and prioritisation maps for conservation and land-use planning.
- Identification of climate refugia and GIS-based protected area gap analysis.
- Design and implementation of structured MCDA decision frameworks (DANP–OWA).
- Translation of modelling outputs into decision-relevant spatial planning scenarios.

## Technical & Computational Skills

- R / RStudio: data manipulation, visualisation, environmental modelling workflows, SDM implementation.
- Python (basic data processing).
- ArcGIS: spatial modelling, suitability mapping, environmental layer processing.
- Climate scenarios: CMIP6 (SSP2-4.5, SSP5-8.5).
- MCDA tools: DEMATEL, DANP, OWA.

## Professional Experience

**Environmental Consultant** — Bina Azma Sepahan Company (Laboratory Set Consulting Engineers / Knowledge-Based) (Nov 2013 – Present)

**Employment timeline:** Full-time (44 hrs/week) Nov 2013 – Feb 2017 · Part-time (25 hrs/week) Feb 2017 – Dec 2017 · Full-time (44 hrs/week) Dec 2017 – Present

### Key responsibilities

- EIA & environmental consulting for industrial projects and urban development plans.
- Environmental compliance & procedures: reviewing and improving protection instructions and workflows.
- Risk & pollution assessment: identifying pollution sources using water/soil sampling and lab results.
- Waste & wastewater management: recommendations for industrial waste disposal and treatment solutions.
- Regulatory consulting: guidance on environmental regulations and organisational requirements.

- Reporting & decision support: interpreting test outputs and translating them into actionable management solutions.

## **Academic Service**

Peer Reviewer for international peer-reviewed journals in environmental science and ecology.

ORCID: 0000-0003-0435-5733

## **English Proficiency**

PTE Academic: Overall 80 (Speaking 90, Writing 74) — Valid until Dec 2027

## **Honors & Awards**

Ranked 18th among >3300 participants in the Iranian National MSc Entrance Exam (2013).

Selected as an Exceptionally Talented Student in the undergraduate program (2013).

## **Certifications & Training**

- Data Manipulation in R (Intersect Australia, 2022).
- Data Visualisation in R (Intersect Australia, 2022).
- R Programming Software (Matris Pedia Training, 2022).
- Learn to Program Python (Intersect Australia, 2022).
- GIS Software (University of Guilan, 2013).
- ENVI Software (Isfahan University of Technology, 2013).
- Health, Safety & Environment (HSE) course (Isfahan University of Technology, 2015–2016).

## **Languages**

Kurdish (native), Persian (native), English (fluent).