

Yasin Güray HATİPOĞLU

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Military: Exempt

Education

2018-2022 – Earth System Science, Ph.D., METU (terminated)
2018/10 – Earth System Science, M.Sc. with thesis, METU
2017/08 – 13th Summer School on Toxic Compounds in the Environment, Masaryk University
2016/06 – Chemistry, B.Sc. (Honors), METU

Languages

- Turkish (Native), English (Advanced, C2), Russian (Beginner, A2), French (Beginner, A2)

Projects

Non-key Modelling Expert (6 months)	Technical Assistance on Preparation of River Basin Management Plans for Six Basins Project (6RBMP)
Project Assistant (5 months)	Enhancing environmental performance in the expanded and extruded polystyrene foam industries in Türkiye (HBCD Project)
Chemist (4 months)	Technical Assistance on Preparation of River Basin Management Plans for Six Basins Project (6RBMP)
Short-term Expert (7 months)	Update of the National Implementation Plan for Stockholm Convention for the Persistent Organic Pollutants Project
GIS Expert (1,5 years)	Constructing an Integrated Ecosystem Modelling-Focused Decision Support System for the Management of the Manyas Lake Basin (TÜBİTAK 1003 Project)
Project Assistant (2,5 years)	Sewage Sludge Management and Action Plan of Turkey (TAÇYEP)
Project Assistant (2 years)	Investigation of the Fate of Brominated Flame Retardants in Aquatic Sediments (TÜBİTAK 1001 Projesi)

Work Experience

2024/02 – Continuing **Founder, Scientist** – FIRE Araştırma Eğitim Ltd. Şti.

2024/10 – 2024/12 Trainer – Impact Hub Ankara

Data Analytics Program for Impact Professionals

o Consultancy and training for spatial analysis and environmental impact

2024/09 – Continuing **Editor-in-Chief** – FIRE Araştırma Eğitim Ltd. Şti.

Science Ascend (ISSN: 3062-0090) Journal Editor-in-Chief

o Biannual Astrophysics Journal (Issue 11 and beyond)

- Interviews with people in the astrophysics field

- Literature review and evaluation of the previous 6 months

- Focus articles on a research/topic/tool

- Astrophysics outreach

o Compiling and reviewing the previous week's preprints (Issue 1-Issue 10)

- Astrophysics, Analytical and Environmental Chemistry, Remote Sensing, Data Analysis

- 2024/03 – 2024/08 Non-key Modelling Expert – NFB Mühendislik ve Müşavirlik A.Ş.
Technical Assistance on Preparation of River Basin Management Plans for Six Basins Project (6RBMP)
o AQUATOOL+ Gescal Water Quality Modelling
- 2023/05 – 2024/03 Founder – Solopreneurship
2023/11 – 2024/03 Project Assistant – Ministry of Env., Urbanization and Climate Change (TR)
Enhancing environmental performance in the expanded and extruded polystyrene foam industries in Türkiye (HBCD Project) (GEF ID:10082)
o Administrative Works
- Organizing documents, tasks in workshops, TR-EN translations
o Update of the National Implementation Plan for Stockholm Convention
- Planning the inventory of newly listed Persistent Organic Pollutants
- Updating the older inventories (PBDE, DecaBDE)
- 2023/07 – 2023/10 Junior Non-key Expert Chemist – DAI & Ministry of Agr. and Forestry (TR)
o Sample Case Studies on the Impacts of the Application of Environmental Quality Standards on Environment and Health (6RBMP)
- Inventorying priority pollutants and specific substances
- Monitoring the urban and industrial wastewater discharges
- 2022/02 – 2022/09 R&D and Project Expert – FarmLabs Agricultural Technologies and R&D Inc.
- Preparing Project Proposals, Creating Consortiums, and Writing Mid-term Reports
- 2021/09 – 2021/11 Project Manager – 2U1K Engineering and Consultancy Inc.
- Writing reports in line with the IFC, EBRD, World Bank and other standards
- 2021/05 – 2021/07 Environmental and GIS Expert – GEM Sustainability Services and Consultancy Inc.
- Object detection with the remote sensing data from optical-radar high-medium res. satellites
- QGIS 3 spatial analysis
- Examination/evaluation of the house-settlement level survey results
- Assisting in the preparation of Resettlement Action Plan in line with IFC and EBRD standards
- 2020/02 – 2020/08 Short-term Expert – UNIDO & Ministry of Environment and Urbanization (TR)
o Creating the inventory of PBDE and HBCD in Türkiye:
- Desktop studies using the national data and relations from other studies
- Creating surveys, evaluating the results, and reporting them
- 2019/03 – 2020/10 Project Assistant – METU Geodetics and Geographic Information Systems.
- Satellite Remote Sensing
- Field visits to aquatic environments
- Regular reports to the stakeholders and Project funders
- 2018/01 – Continuing Freelance Translator – Kalite Akademik Tercüme and other firms
- TR-EN language pair translation, editing, and redaction services for academic articles
- 2016/10 – 2019/03 Project Assistant – METU Env. Eng. & Ministry of Env. and Urbanization (TR)
- Collecting, preprocessing, analysing, and reporting survey results from industries
- Organizing regional workshops
- 2015/09 – 2017/08 Project Assistant – METU Environmental Engineering
- Designing the experimental setup, making micro-mesocosm experiments
- Field visits to collect air and sediment samples in regular – bimonthly intervals
- 2014/07 – 2014/12 Project Assistant – METU Environmental Engineering and DOKAY
- Preparing passive samplers to regularly monitor urban ozone, nitrous oxide, BTEX, VOC
- Training newcomers
- 2009/07 – 2009/08 Intern – SMMM İbrahim Gökçe
- Internship in an accountant firm

Publications

Publications (Peer-reviewed)

Hatipoğlu, G., Kurt, Z. (2020). Modeling irrigation with nitrate contaminated groundwater. Pamukkale University Journal of Engineering Sciences, 26 (3), 468-480. <https://dergipark.org.tr/en/pub/pajes/issue/54792/748947>

White Papers-Reports

Hatipoğlu, G., Couto, N. (2022). 3 - Site Characteristics, Contaminants and Laboratory Investigation. Multi-phase Extraction (MPE) Report. Chapter. <https://www.impel.eu/contents/libraryfile/mpe-impel-final-report-2022-10-mpe-en.pdf>

Conference Presentations

Attree, N., Cramer, F., Broquet, A., Seignovert, B., Hatipoğlu, G., Solmaz, A., & Wieczorek, M. (2025). *Planetary Research: A new diamond open access journal for planetary science* (No. EPSC-DPS2025-39). Copernicus Meetings.

Kacholia, D., Verma, N., D'Amore, M., Angrisani, M., Frigeri, A., Schmidt, F., Carruba, V., Hatipoğlu, Y.G., ... & Ivanovski, S. (2025). *Artificial Intelligence in Planetary Science and Astronomy: Applications and Research Potential* (No. EPSC-DPS2025-1467). Copernicus Meetings.

Ivanovski, S. L., Verma, N., Hatipoğlu, Y. G., Angrisani, M., Solmaz, A., Smirnov, E., ... & D'Amore, M. (2025). *Europlanet Machine Learning Working Group: a year of progress* (No. EPSC-DPS2025-1815). Copernicus Meetings.

Hatipoğlu, G. (2023, Ekim). Mitigating noise-related object detection problems in JWST MIRI images by FFT-based methods. Sözlü sunum. BEYOND2023. TOBB Üniversitesi, Ankara, Türkiye.

Hatipoğlu, G. (2021, Mayıs). Checking Landsat 8 OLI's predictive power in the retrieval of chlorophyll-a and phycocyanin concentrations of a reservoir with high frequency field data. Sözlü sunum. Intercontinental Geoinformatics Days – 2021. Çevrimiçi.

Hatipoğlu, G. (2019, Eylül). Decontamination Nitrate Containing Groundwater with Pump and Fertilize Application to Maize Farms, but where? Finite Element Method Utilization with HYDRUS 1D. Sözlü sunum. Beyond 2019: Computational Science and Engineering Conference. Ankara, Türkiye.

Hatipoğlu, Y. G., Kurt, Z. (2018). Application of Finite Element Method by HYDRUS 1D for assessing the effects of Irrigation by Contaminated Groundwater in Turkey. Sözlü sunum. Beyond: Workshop on Computational Science and Engineering. Ankara, Türkiye.

Poster Presentations

Demirtepe H., Hatipoğlu, G., İmamoğlu, İ. (2017, Ocak). Abiotic degradation of decabromodiphenylether (BDE-209) via catalyzed hydrogen peroxide propagations. Poster presented at 9th International Conference on Remediation and Management of Contaminated Sediments. New Orleans, Louisiana.

Preprints

Hatipoğlu, G. (2024). Value Sliced and Derivative Images for Source Mask in JWST MIRI Photometry. arXiv:2401.15779

Hatipoğlu, G. (2023). JWST MIRI Imaging Data Post-Processing Preliminary Study with Fourier Transformation to uncover potentially celestial-origin signals. arXiv:2304.00728

Hatipoğlu, G. (2023). PCA-based Data Reduction and Signal Separation Techniques for James-Webb Space Telescope Data Processing. arXiv:2301.00415

Hatipoğlu, G. (2022). Utility of PCA and Other Data Transformation Techniques in Exoplanet Research. arXiv:2211.14683

Hatipoğlu, G. (2022). On the Use of Dimension Reduction or Signal Separation Methods for Nitrogen River Pollution Source Identification. arXiv:2204.13182

Grants

Travel Grant

2023 / 07 School: Better Inclusion, Better Science, Building Impact in MW-GAIA-1000 €

Models and Softwares

- HYDRUS 1D vadose zone groundwater modelling, water and pollutant transport
- **Python machine learning, statistical analysis, data processing, remote sensing, astrophysics**
- **Microsoft Office Word, Excel, Libre Office, LaTeX**
- **R 4.x machine learning, visualization**
- GMS MODFLOW, MT3D, RT3D groundwater flow, chemical/pollutant flow and reaction modelling
- QGIS map making and spatial analysis
- Google Earth Pro, Google Earth Engine

Selected Certificates/Training Programs

Work / Management

- 2026 / 01 Giriřimcilik Temelleri – BTK Akademi
- 2026 / 01 Müřteriyi Tanımak – BTK Akademi
- 2026 / 01 Pazar Arařtırması ve Fiyatlandırma Stratejisi – BTK Akademi
- 2025 / 11 İSG Hizmetlerinin Yürüyümüne İliřkin İřveren veya İřveren Vekili Eđitimi - ÇASGEM

Personal Development / Communication

- 2023 / 02 Etkili İletişim Stratejileri – BTK Akademi
- 2023 / 02 Kişisel Stres Yönetimi – Bilgeleş – METU – ÇŞGB
- 2022 / 01 Preparing to Network in English - UWashingtonX
- 2022 / 01 Translation Certification Guidance TR TO EN & EN TO TR - OneForma
- 2021 / 07 Sagan Summer Workshop 2021 – (5 days) – Workshop – NASA ExSci
- 2021 / 04 Certified Peer Reviewer Course – Elsevier Researcher Academy
- 2020 / 11 Sanat Terapisi Eđitimi (10 saat) – Karabük Üniversitesi Uzaktan Eđitim Merkezi
- 2020 / 08 TESOL (120 saat) - Vancouver International College Career Campus
- 2017 / 08 13th Summer School on Toxic Compounds in the Environment 2017 – RECETOX

Natural Resource Management

- 2024 / 04 Using land-cover information to monitor progress on Sustainable Development Goal 15 - FAO
- 2021 / 10 Introduction to Lidar – NOAA
- 2021 / 09 ASTM STANDARDS: PFAS, Sediment and Climate Resilience – Remtech Europe
- 2021 / 08 Introduction to the 2030 Agenda: A New Agenda for a Sustainable World – UNITAR
- 2021 / 08 Monitoring Forest and Landscape Restoration – FAO
- 2021 / 08 Introduction to Forest and Landscape Restoration – FAO
- 2021 / 08 Integrated Urban Flood Risk Management: Lessons from Japan – World Bank OLC

Information Technology

- 2026 / 01 Uzun Kısa Süreli Bellek – LSTM – BTK Akademi
- 2023 / 02 Python ile Programlama – 2 – Bilgeleş – METU - ÇŞGB
- 2023 / 02 Python ile Programlama – 1 – Bilgeleş – METU - ÇŞGB
- 2022 / 01 Data Science: Visualization - HarvardX
- 2022 / 01 Data Science: Wrangling - HarvardX
- 2021 / 08 Python Basics for Data Science – IBM
- 2021 / 08 Introduction to Cloud Development with HTML, CSS, and JavaScript – IBM
- 2021 / 08 Essential Technologies for Business – [3-course-program](#) of IBM
- 2021 / 07 Python – Certificate of Completion – Kaggle
- 2021 / 07 Introduction to Cloud Computing – IBM
- 2021 / 04 Why do we need different approach to analyze compositional data – RECETOX
- 2020 / 02 Fundamentals of Deep Learning for Multiple Data Types – NVIDIA DLI
- 2020 / 02 Fundamentals of Deep Learning for Computer Vision – NVIDIA DLI

Earth Observation / Remote Sensing

- 2021 / 08 Monitoring Coastal and Estuarine Water Quality: MODIS to VIIRS – NASA ARSET
- 2021 / 08 Sat. Obs. for Analyzing Natural Hazards on Small Island Nations – NASA ARSET
- 2021 / 08 Species Distribution Modeling with Remote Sensing – NASA ARSET
- 2021 / 03 Use of SIF & LIDAR to Assess Vegetation Change and Vulnerability – NASA ARSET
- 2021 / 03 How to prepare a case study – Demo – EUMETSAT
- 2021 / 02 Crop mapping using Copernicus Sentinel data – WEKEO