Rufat Mammadov

Address: Lange Point 23, 85354 Freising

Mobile: +49 1520 715 40 98

Email: rufat.mammadov@tum.de

LinkedIn: linkedin.com/in/rufatm

EDUCATION

M.Sc. Sustainable Resource Management
10/2022 – 11/2024

Technical University of Munich (TUM)   Munich, Germany   **Grade: 1.6 (US GPA: 3.4)**

- **Relevant coursework:** Material Flow Management and Applications, Waste and Wastewater Treatment, LCA, Water Energy Food Nexus, System Analysis, GIS, Inventory Methods, Project Management, Ecology, Statistics, Remote Sensing, Renewable Energy Technologies, Climate Change Economics.
- Conducted an LCA analysis of solar PVs and a systematic review of LCAs of sugar substitutes.
- Conducted a dynamic inflow-driven MFA of LFP batteries in the EU using Python.
- Deutschlandstipendium recipient.

Master's Thesis: Simulation Model for Material Flows from End-of-Life Vehicle Recycling for Metals
Professorship Circular Economy @ TUM   *06/2024 – 11/2024*

- Currently building a material flow simulation model for EOL vehicle recycling systems in Python.

B.Sc. Mechanical Engineering (ABET certified, QS Subject Ranking: Top 251-300)
08/2016 – 06/2020

Bilkent University   Ankara, Turkey   **GPA: 3.07/4.00 (German grade: 1.9)**

PROFESSIONAL EXPERIENCE

Research Assistant
06/2024 – present

Fraunhofer UMSICHT   Oberhausen, Germany

- Building an LCA module for a system dynamics simulation of circularity pathways for batteries in AnyLogic.

Working Student, Materials and the Circular Economy
10/2023 – 04/2024

Systemiq   Munich, Germany

- Conducted comparative analyses and research on selected key LCA / PCF methodologies with high relevance for the automotive industry.
- Supported the preparation of materials for meetings and analyses, such as modeling electricity in market-based and location-based approaches, with synthesis of key implications for relevant decision-makers.
- Documented and synthesized weekly expert group meetings where all relevant LCA / PCF topics in the context of the automotive sector were discussed in detail.

Sustainability Consultant
06/2021 – 08/2022

EY, Climate Change and Sustainability Services   Baku, Azerbaijan

- Performed sustainability gap analyses and proposed relevant recommendations, goals, and KPIs for the integration of sustainability considerations into business performance.

- Advised clients on appropriate ESG reporting in annual sustainability reports according to GRI and GHG Protocol standards.
- Audited ESG indicators.
- Analyzed internal company policies and developed sustainability policy recommendations.

Key Achievements:

- **Personal initiative:** Redesigned and automized the Scope 3 GHG calculation methodology for a major telecom client using MATLAB that eliminated 90% of calculation efforts.
- Achieved a double promotion to senior consultant within two years due to consistently above-average performance and leadership in project management.

Intern   11/2020 – 05/2021

EY, Climate Change and Sustainability Services   Baku, Azerbaijan

Undergraduate Researcher   05/2018 – 08/2019

Bilkent University, Fluid Frame Lab   Ankara, Turkey

- Simulated the dynamics of a micron-sized silica particle in an optical trap using numerical methods. Visualized statistical data in C++ using GNUPLOT. Received an excellent assessment for the final report.

VOLUNTEERING

Sustainability Officer & Global Shaper   12/2022 – present

Global Shapers Munich   Munich, Germany

- During my term as a sustainability officer (06.23 – 06.24), I curated the sustainability strategy of our hub. I developed sustainable event guidelines and integrated them into our project kick-off process. Currently responsible for the preparation of the sustainability report outlining the hub's impact on Munich.
- Led a series of Climate Café events focused on biodiversity, carbon capture, nuclear fusion, and degrowth.
- Taught refugees computer skills as part of Refugee Computerklasse project.

Mathematics Tutor and Mentor   05/2021 – 12/2021

LUMUN Holding   Baku, Azerbaijan

- I taught mathematics and provided guidance on personal development to a student from a disadvantaged background. I created a personalized curriculum and weekly homework assignments.

KEY SKILLS AND STRENGTHS

Sustainability-oriented skills: LCA, MFA, Ecoinvent, OpenLCA, AnyLogic, VENSIM, ArcGIS, ESG diagnostics, materiality analysis, sustainability reporting, ESG auditing.

Other hard skills: Previous experience with a variety of programming languages (e.g., MATLAB, Java, C++, Python), research, modeling & simulations, technical writing, MS Office 365.

LANGUAGES

Azerbaijani	Russian	English	German
Bilingual proficiency (B2)	*Bilingual proficiency (C2)*	*Professional proficiency (C1)*	*Intermediate proficiency (B1)*

Freising, 05.11.2024