

## Sena Melis Kaleli / Civil Engineer

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Ankara, Türkiye

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### Professional Summary

A highly motivated and detail-oriented Project Development Engineer with a strong background in civil engineering and sustainable project implementation. With over three years of experience in project development, international business development, and tender management, I have contributed to internationally funded initiatives, strategic tendering processes, and the development of renewable energy, water resources management, and infrastructure projects. Proficient in engineering tools and techniques, project coordination, and proposal development, I excel at navigating high-pressure environments while ensuring quality and cost efficiency. My technical expertise, supported by advanced problem-solving skills and familiarity with tools like GIS and data analysis, enables me to design, implement, and optimize solutions that address complex challenges. Through cross-functional collaboration, design thinking, and a commitment to continuous learning, I strive to create resilient, cost-effective, and impactful projects that align with tomorrow's world. I am particularly interested in soft computing, data analysis, AI, MCDM, natural resource management—specifically water resources—as well as hazard and risk management studies

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### Skills

- **Engineering Software:** AutoCAD, Primavera Risk Analysis, ArcGIS, QGIS, SWAT+, MATLAB, Python, R
  - **Project Management:** MS Office Suite, Jira, Contract Management (FIDIC), Risk Analysis
  - **Languages:** Turkish (Native), English (Advanced), Spanish (Beginner)
  - **Key Competencies:** Data Analysis, Scientific Research, Proposal Development, Technical Writing, Procurement, Stakeholder Communication, Budgeting
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### Professional Experience

#### Project Development Engineer

*Environmental Chemical Corporation, Burlingame, CA, USA / Remote*

2023-05 – Present

- Managed proposal development for renewable energy and infrastructure projects, ensuring compliance with international procurement standards.

- Collaborated with multidisciplinary teams to assess project feasibility and prepare technical and financial proposals.
- Developed significant relationships with customers and suppliers, helped team to get new business partnerships and deals.
- Developed notification systems using Web Scrapping tools and Python Libraries for tracking contracts, tenders.

### **Tendering Engineer**

*OPTIMAL Project Management, Istanbul, Türkiye*

2023-02 – 2023-05

- Followed procurement notices from international financial institutions (IFIs) and national organizations.
- Prepared pre-qualification and expression of interest documents for construction consultancy projects.
- Monitored compliance with organizational strategies during project proposal processes.
- Tracked compliance with contracts and project developments.

### **National Project Assistant**

*Ministry of Environment, Urbanization and Climate Change (MoEUCC), Ankara, Türkiye*

2022-06 – 2023-02

- Supported a UNIDO implemented GEF-funded project focused on eliminating priority chemicals in polystyrene industries.
- Conducted risk assessments, training needs analyses, and budget/work plan studies and oversees the project.
- Ensured contract compliance.
- Organized project workshops and site visits with over 100 participants, ensuring effective stakeholder communication.

### **GIS Specialist Intern**

*Nature Conservation Center (DKM), Ankara, Türkiye*

2022-03 – 2022-05

- Conducted spatial data analysis using QGIS and SWAT+ for watershed modeling.
- Provided data integration and visualization support for biodiversity studies.
- Represented DKM at the CARE+ Project in Murcia, Spain.

### **Research Intern**

*Middle East Technical University Applied Ethics Research Center (AERC), Ankara, Türkiye*

2021-10 – 2022-03

- Evaluated Turkey's water policy issues through ethical frameworks.
- Collaborated on publishing research aimed at improving socio-economic parameter integration in hydrological models.

**Undergraduate Research Assistant**

*Middle East Technical University, Ankara, Türkiye*

2020-11 – 2021-08

- Handled data transformation and data integration with effective use of Python and OSS's.
- Performed statistical, qualitative, and quantitative analyses, including multi-model ensemble analysis of meteorological data.
- Contributed to watershed modeling processes.
- Performed literature reviews for reports and submission to peer-reviewed journals.
- Supported budget management and organized events for the research team.

**Founder & President**

*METU Civil Engineering Sustainability Team (CEST), Ankara, Türkiye*

2021-04 – 2022-01

- Established a student organization focused on sustainability in engineering, growing membership to over 100.
- Led six interdisciplinary projects and hosted seminars with over 700 participants.
- Developed an AI and programming curriculum to support team projects.

**Program Coordinator**

*Arkhé Project, Şirince/ İzmir, Türkiye*

2020-06 – 2020-08

- Coordinated and executed events involving logistics, budget allocation, activity planning, and transportation for 100 students and 15 experts.
- Identified issues, analyzed information, and provided solutions to problems.
- Maintained energy and enthusiasm in a fast-paced environment.

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**Education****Master of Science in Civil Engineering – Water Resources Management**

Middle East Technical University (METU), Ankara, Türkiye

2023-02

- Relevant Coursework: Decision Analysis: Tools and Methods, Water Resources System Engineering I (Optimization), Statistical Modeling in Hydrology, Research Methods and Ethics in Civil Engineering
- Thesis Work (In Progress): Past Water Cycles in Mars, Simulation and Modelling of Mars

**Bachelor of Science in Civil Engineering**

Middle East Technical University (METU), Ankara, Türkiye

2016-08 – 2022-08

- GPA: 2.82 (Top 10% of the department)

- Elective Courses: Statistical Techniques in Hydrology, GIS, Cost Estimation, Earthquake Engineering
  - Activities: METU Sports Climbing (APES), METU Big Band Jazz Vocal, METU EDT Latin Dance Coordinator, METU Capoeira Member, Founder of METU CEST
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### **Certifications & Awards**

- **Certificates:** Project Control Engineering Training (Derin Mavi Consultancy - 2024), Solar Energy Systems Overview (University of Buffalo – 2024), Mathematics for Machine Learning (Imperial College London – 2024), Fundamentals of GIS (UC Davis – 2021) , Computational Thinking and Problem Solving (University of Pennsylvania – 2020), World Bank Contract Management Program (2023), Disaster Risk Management Trainee (CRAFT Project), Climate Ambassador (EU, 2021), Comenius – Nowadays Dilemma: Technology (EU - 2014)
  - **Awards:** TEV Scholarship, METU Alumni Scholarship, TÜBİTAK STAR Scholarship, SANKO Energy Scholarship
  - **Recognitions:** Regional Chess Player (4 medals), Most Efficient Design Award (METU Civil Engineering), Best Music Implementation (National Theatre Festival)
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### **Additional Projects**

- **Smart Building Energy Solutions (Sensgreen, IoT Company):** Improved sensor performance and contributed to LEED/WELL certification strategies.
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**References** Available upon request.