#### PERSONAL INFORMATION

# **Engin Can Esen**

snennc@unife.it

Nationality Turkish



### **WORK EXPERIENCE**

### February 2024 - May 2024

#### Intern-Research Assistant

Ege University, Institute of Nuclear Sciences 35100 Izmir, Turkey

- Conducted research in the field of environmental radioactivity, with a primary focus on radon gas
- Measured radon concentrations in indoor air, soil, and water
- Used RAD7 detection system for monthly monitoring
- Collected and cleaned data for statistical analysis
- Compared results with reference limits established by various international standards
- Contributed to documentation and interpretation of scientific findings

Higher Education and Scientific Research - Environmental Radioactivity

#### December 2022 - June 2023

# Participant – Data Science and Machine Learning Program

MIUUL(VBO), Istanbul - 34000, Turkey

- Participated in a hands-on Data Science and Machine Learning training program
- Developedpractical projects involving:
  - Customerchurn prediction models for FLO
- Recommendation systems using real user data from Armut
- Real estate price analysis using regression models
- Utilized tools and libraries such as Python, Pandas, NumPy, Scikit-learn, and SQL
- AppliedA/B testing methods to evaluate model effectiveness
- Focused on data preprocessing, feature engineering, model training, and performance evaluation

Online Education in Data Science and Artificial Intelligence

# **Physics Teacher**

## September 2021 - June 2022

Fen Bilimleri, 35610 İzmir, Turkey

- Taughtphysics courses to final-yearhighschool students preparing foruniversity entrance exams
- Delivered lessons and conducted problem-solving sessions in alignment with the national curriculum
- Provided structured instruction to intermediate-year students, focusing on conceptual understanding
- Designededucational materials tailored to various student levels
- Aimed to build students' physics knowledge from basic to advanced levels

## **EDUCATIONAND TRAINING**

# September 2019 – June 2024

# Bachelor of Science in Physics Final GPA: 3.38 / 4.00 – Equivalent to 95 / 110

EQF Level 6 (Bachelor's Degree)

Faculty of Science, Department of Physics – Manisa Celal Bayar University Manisa, Turkey

- Analysis of radon measurements in environmental sciences
- Experimentalstudy using sol-gel method in solid state physics

#### Mother tongue(s) TURKISH

#### Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B1(5.0)	B1(5.0)	B2(5.5)	B2(5.5)	B2(5.5)
ENGLISH IELTSACADEMICB2 (5.5)				

#### **PROJECTS**

# February 2024 - May 2024

# Intern — Environmental Research Trainee (Monitoring of Radon in Urban Water Distribution Systems)

EgeUniversity, Institute of Nuclear Sciences - 35100 Izmir, Turkey

- Carried outa monthly radon gas monitoring project in the city's water distribution network
- Used RAD7 device to measure radon concentration
- Collected and preprocessed environmental data
- Contributed to the scientific interpretation of findings related to environmental radioactivity
- Analyzedresults and compared them with international reference standards

### December 2022 - June 2023

# Participant – Practical Data Science & Machine Learning Project (Customer Segmentation – FLO)

MIUUL(VBO), Istanbul - Turkey Online Education in Data Science and Artificial Intelligence

- Developed a classification model for customersegmentation using behavioral and purchasing metrics
- Performed data preprocessing, feature selection, and trained machine learning models (K-Means, Random Forest)
- Applied the model to real CRM data from FLO to improve retention strategies
- Technologies used: Python, Pandas, NumPy, Seaborn, Scikit-learn

# December 2022 - June 2023

# Participant – NLP & Machine Learning Project (SentimentAnalysis – Reddit (r/WallStreetBets)

MIUUL(VBO), Istanbul - Turkey Online Education in Data Science and Artificial Intelligence

- Built a sentiment classification model on Reddit comments related to stock trading (buy/sell)
- Applied Natural Language Processing (NLP) to detect stock names and user position statements
- Technologies used: Python, Scikit-learn, ChatGPT, NLTK

# December 2022 - June 2023

# Participant – Practical Data Science & Machine Learning Project (Personalized Recommendation System – Armut)

MIUUL(VBO), Istanbul – Turkey Online Education in Data ScienceandArtificial Intelligence Minors in Data Science:

Pursuedasecondary academic focus in Data Science, withcoursework in machinelearningand data analytics.

- Designeda personalized recommendation system based on real customer data from Armut
- Worked on data preprocessing, exploratory analysis, collaborative and content-based filtering
- Appliedmodel evaluation techniques such as RMSE and A/B testing
- Technologies used: Python, Pandas, NumPy, Scikit-learn, ChatGPT

#### Organisational / managerial skills

- Developed team collaboration and long-term project coordination skills during a Data Science & Machine Learning bootcamp, working on practical, goal-oriented group projects
- Gained experience in project planning, milestone tracking, and task delegation in fast-paced, deadline-driven environments
- $\bullet \text{ As a physics teacher, demonstrated classroom management, student performance monitoring, and } \\$ curriculum-based lesson planning
- Skilled in time management, multitasking, and maintaining productivity across multiple educational and research roles

- Job-related skills Hands-on experience in data analysis and visualization using Python libraries (Pandas, NumPy, Matplotlib, Seaborn)
  - Built Machine Learning models from scratch, including data preprocessing, feature engineering, model training, and evaluation
  - Developed and deployed Deep Learning projects in areas such as recommendation systems and sentiment analysis
  - Applied Natural Language Processing (NLP) techniques in real-world text classification and sentiment projects
  - Worked with real datasets from companies like FLO and Armut to solve business problems through Al solutions
  - Experienced in evaluating models with metrics like RMSE, precision, recall, and using A/B testing in experimental setups

- Computer skills Proficient in Python programming, including libraries such as NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, TensorFlow, and Keras (acquired through academic training and hands-on ML/DL projects)
  - Skilled in data visualization and exploratory data analysis using Matplotlib and Seaborn
  - Experience with SQL, A/B testing, and model evaluation in business-oriented machine learning projects
  - Familiar with tools such as Jupyter Notebook, Google Colab, Git, and Visual Studio Code
  - Good command of Microsoft Office tools (Word, Excel, PowerPoint) and Overleaf (LaTeX) for reporting and presentations

#### Other skills

 Consistent in self-directed learning and staying up to date with new technologies in data science and ΑI