

# Ata Berk KARABAG

Master's student in data science and AI

## CONTACT

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## EDUCATION

### Université de Strasbourg

Master's in Data Science and AI

September 2024- June 2026

### Université Sorbonne Paris Nord

Bachelor's degree in computer science - Graduated in the top 10% of the class

September 2021- July 2024

## SKILLS

**Programming & Tools:** Python, SQL, R, C, C++, Java, JavaScript

**Libraries & Frameworks:** pandas, NumPy, scikit-learn, PyTorch, TensorFlow, matplotlib, seaborn

**Tools:** Git, GitHub, Jupyter, Google Colab, VS Code

**Concepts:** Supervised & Unsupervised Learning, CNNs, Transformers, Clustering, Time series

**Soft skills:** Strong communication, team collaboration, group project experience

**Languages:** English (fluent), French (fluent), Turkish (native)

## EXPERIENCE

### Back End Developer Intern

Vestel - Izmir/Turkey

- Contributed to the development of a project using AWS
- Cloud and Python
- Debugging the code and documenting the processes,
- Enhancing the project's efficiency and maintainability.
- Worked in a large corporate environment



## PROFILE

Curious and analytical Master's student in Data Science and Artificial Intelligence, with a strong interest in learning and applying modern AI techniques. I have completed several group projects during my studies, particularly in deep learning, and received strong academic results. My experiences have strengthened my communication skills and my ability to collaborate effectively in team settings. I am currently seeking internship opportunities to further develop my skills and contribute meaningfully to real-world projects.



## PROJECTS

### Stock Market Forecasting using LSTM and Transformers

- Built predictive models on historical stock market data using LSTM and Transformer architectures
- Compared the performance of both models using metrics such as RMSE and MAE
- Analyzed results and explained differences in performance based on model architecture
- Worked in a group of 3, actively contributing to model development and presentation

### Battery Health Prediction using ML Models

- Predicted the State of Health (SOH) of batteries using MIT time series data
- Compared RNNs, random forests, and regression models for accuracy and explainability
- Gained experience in model interpretation and real-world industrial AI applications

### Water Quality Clustering and Spatial Interpretation

- Analyzed French water quality data (RCS stations) using unsupervised clustering
- Cross-referenced clusters with a biological index (I2M2) and created spatial visualizations with CORINE Land Cover
- Observed meaningful geographic clustering patterns suggesting environmental influence

### Crop Type Classification from Satellite Image Time Series

- Classified agricultural crop types using monthly satellite images per field
- Compared several classification approaches and architectures, including model ensembles
- Analyzed the temporal dynamics of pixel data to improve classification performance