

# Kokosis Nikolaos

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## Summary

Aspiring Data Scientist with a strong foundation in Statistics, currently pursuing an MSc in Cybersecurity and Data Science. Through hands-on projects, I have developed expertise in Python, SQL and various data analysis libraries, which I leverage to extract meaningful insights from complex datasets in real-world applications. Eager to leverage my skills to a dynamic work environment, aiming to be a valuable asset to the organization I join.

## Work Experience

### Data Science Research Associate

Remote

University of Piraeus

Nov 2023 - Present

- Collaborated with a team of researchers to analyze and preprocess complex datasets, enhancing data quality and predictive accuracy.
- Implemented a Hybrid LSTM neural network to predict station occupancy, achieving a high mean F1-score of **96.29%** across 27 charging stations.
- Researched and Developed methodologies for forecasting daily, weekly and monthly electric vehicle charging demand, leading to a new daily forecasting approach that reduced RMSE by **92.74%**.

### E-Advisor Intern

Athens, Greece

Alpha Bank

June 2020 - Dec 2020

- Developed strong analytical and communication skills while assisting clients with digital banking services.
- Strengthened interpersonal and problem-solving skills, elevating customer satisfaction in a hands-on internship role.
- Gained insights into the financial industry and honed problem solving abilities.

## Projects

### Temporal Network Analysis and Link Prediction

Jun 2023 - Oct 2023

- Performed temporal network analysis and link prediction on a **63.5M** row dataset, utilizing time-aware centrality measures and three data creation strategies. Achieved **86.56%** accuracy with an **ANN**, surpassing **LR (79.88%)** to enhance network dynamics understanding and connection prediction.
- **Technical Skills:** Python, NetworkX, Network Analysis, Temporal Dynamics, Machine Learning, Model Evaluation

### Maritime Data Analysis and Vessel Location Prediction

May 2023 - Sep 2023

- Developed a comprehensive database from **raw AIS data** collected at the University of Piraeus, followed by EDA and data cleaning. Leveraged this refined dataset to build a **Bi-GRU** predictive model, achieving an RMSE of **23.21** meters, effectively anticipating vessel locations for **35** vessels.
- **Technical Skills:** PostgreSQL, QGIS, Python, GeoPandas, Data Cleaning and Enrichment, Deep Learning

### Clustering and Predictive Modeling of US Road Accidents (2016-2023)

Nov 2022 - Feb 2023

- Analyzed US road accidents (2016-2023) using **clustering** and **predictive modeling** to assess severity factors. Employed **K-Means**, **DBSCAN** and **ANN** to uncover patterns and develop a predictive model, enhancing insights into accident dynamics and informing safety measures.
- **Technical Skills:** Python, Statistical Analysis, Imbalanced Dataset Handling, PCA, Machine Learning

## Skills

**Programming Language** Python, SQL, MATLAB, LaTeX

**Libraries & Frameworks** Pandas, GeoPandas, Matplotlib, Seaborn, Folium, NumPy, Scikit-Learn, TensorFlow, Beautiful Soup, NetworkX

**BI & Visualization Tools** SAS, Power BI, SPSS, Microsoft Excel

## Education

### University of Piraeus

Athens, Greece

MSc in Cybersecurity & Data Science

Oct 2022 - Current

- 2-year program with a focus on Data Science and Information Technology, aligned with the skills and expertise required for a Data Scientist role.

### University of Piraeus

Athens, Greece

BSc in Statistics and Finance

Sep 2015 - March 2022

- 4-year program with a focus on Statistics, Insurance, Demography, Economics and Mathematics.

## Languages

**English** C2 Proficiency

**Greek** Native