DESPOINA TOUSKA

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PROFILE

Currently pursuing my Master's in Artificial Intelligence (AI), I bring three years of research engineering experience. Skilled in programming languages including Python, C, C++, JavaScript, and SQL, I'm deeply passionate about exploring AI solutions, especially in Computer Vision. My focus is on harnessing AI's potential to make tangible real-world contributions and driving advancements in technology and problem-solving.

EDUCATION

MS Artificial Intelligence

September 2023 - Present

University of Amsterdam

Amsterdam, the Netherlands

• Awards: Qualcomm Diversity in AI Fellowship (info)

M.Eng in Electrical and Computer Engineering

October 2013 - April 2020 Thessaloniki, Greece

Aristotle University of Thessaloniki

• Cumulative GPA: 8.35/10

- Relevant Coursework: Pattern Recognition, Parallel & Distributed Systems, Probabilities & Statistics, Data Structures, Structured Programming, Robotics, Database Systems
- Thesis: Video Forgery Detection using Autoencoder and Recurrent Neural Networks (info)

EXPERIENCE

Centre for Research and Technology Hellas (CERTH)

September 2020 - July 2023

Machine Learning Research Engineer

 $Thessaloniki,\ Greece$

- Developed data science prototype applications within EU Horizon projects.
- Created services to integrate Apache Kafka/RabbitMQ into existing architecture to allow event-driven data flow.
- Co-authored 9 scientific papers presented at conferences and workshops, focusing on object detection, object tracking, and activity recognition.

Instituto Superior de Engenharia do Porto (ISEP)

October 2019 - February 2020

Software Developer Intern

Porto, Portugal

- Create a hand gesture dataset comprising video and key-point formatted data.
- Developed a prototype web application facilitating data collection, training, and real-time prediction of sign language translation to text via webcam input.
- Utilized JavaScript for the frontend and implemented a Flask API for backend functionality.

Centre for Research and Technology Hellas (CERTH)

March 2018 - May 2018

Machine Learning Engineer Intern

Thessaloniki, Greece

- Contributed to the research for a multimedia forensics scientific paper.
- Developed ML models and evaluated them for specific Computer Vision and Natural Language Processing tasks.

INDICATIVE PUBLICATIONS

- D. Touska, K. Gkountakos, K. Ioannidis, T. Tsikrika, S. Vrochidis, I. Kompatsiaris. *Graph-Based Data Association in Multiple Object Tracking: A Survey.* MMM2023. 2023.
- Gkountakos, K., Touska, D., Ioannidis, K., Tsikrika, T., Vrochidis, S., & Kompatsiaris, I. Spatio-temporal activity detection and recognition in untrimmed surveillance videos. ICMR. 2021.
- Gkountakos, K., Galanopoulos, D., **Touska, D.**, Ioannidis, K., Vrochidis, S., Mezaris, V., & Kompatsiaris, I. ITI-CERTH participation in ActEV and AVS Tracks of TRECVID 2021. TRECVID. 2021.
- Zampoglou, M., Markatopoulou, F., Mercier, G., **Touska, D.**, Apostolidis, E., Papadopoulos, S., ... & Kompatsiaris, I. Detecting tampered videos with multimedia forensics and deep learning. MMM2019. 2019.

SKILLS

Languages: English (fluent, C2, IELTS: 7.5/9), Greek (native), German (beginner, A2).

Programming Languages: Python (advanced), C/C++, JavaScript, HTML, CSS, SQL.

DL Libraries: PyTorch, Keras, Tensorflow, TensorFlow.js, OpenCV, NumPy, Pandas, Sci-Kit Learn.

Miscellaneous Tools: Docker, Apache Kafka, RabbitMQ, REST API, WebSocket API, Postman, Git, GitLab.