DESPOINA TOUSKA

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PROFILE

I am a Machine Learning Research Engineer with three years of expertise in researching and developing AI software. My skills include a strong foundation in programming languages such as Python, C, C++, JavaScript, and SQL. I am passionate about creating AI solutions, particularly in the realms of computer vision and other diverse domains.

EDUCATION

University of Amsterdam — Amsterdam, the Netherlands
MS Artificial Intelligence — *September 2023 - Present*
- Awards: Qualcomm Diversity in AI Fellowship (for more information)

Aristotle University of Thessaloniki — Thessaloniki, Greece
M.Eng in Electrical and Computer Engineering — *October 2013 - April 2020*
- Cumulative GPA: 8.35/10
- Relevant Coursework: Pattern Recognition, Parallel & Distributed Systems, Probabilities & Statistics, Data Structures, Structured Programming, Robotics, Database Systems

Centre for Research and Technology Hellas (CERTH) — Thessaloniki, Greece
Collaboration for thesis completion — *November 2018 - September 2019*
- Thesis: Video Forgery Detection using Autoencoder and Recurrent Neural Networks (link)
- Grade: 10/10

EXPERIENCE

Centre for Research and Technology Hellas (CERTH) — Thessaloniki, Greece
Machine Learning Research Engineer — *September 2020 - Present*
- Actively contributed to the publication of 8 scientific papers on the topics of object detection, object tracking, and activity recognition at conferences and workshops.
- Managing Data Science tasks within EU Horizon projects.

Instituto Superior de Engenharia do Porto (ISEP) — Porto, Portugal
Software Developer Intern — *October 2019 - February 2020*
- Created a hand gesture dataset with data in a video format and a key-point format using CNNs.
- Developed a prototype web application for data collection, training, and prediction of sign language translation to text through webcam, using Javascript for the frontend and Flask API for the backend.

Centre for Research and Technology Hellas (CERTH) — Thessaloniki, Greece
Machine Learning Engineer Intern — *March 2018 - May 2018*
- Contributed to the research for a multimedia forensics scientific paper.
- Developed and evaluated ML models for 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.
Libraries: PyTorch, Keras, Tensorflow, TensorFlow.js, OpenCV, NumPy, Pandas, Sci-Kit Learn.
Production Tools: Docker, Apache Kafka, RabbitMQ, REST API, WebSocket API, Postman, Git, GitLab.