DESPOINA TOUSKA

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RESEARCH INTERESTS

Software engineer with 2+ years of experience as a research associate in the machine learning and computer vision fields. Posses abilities to identify, understand and translate program requirements into sustainable, advanced technical solutions through Python, C, C++, JavaScript, and other programs for continuous improvement of AI technologies.

EDUCATION

Aristotle University of Thessaloniki Thessaloniki, Greece
MSc 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 *March 2018 - May 2018*

- 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 Engineer and Research Associate *September 2020 - Present*

- Contributed to scientific papers published on conferences and workshops.
- Developed and integrated machine learning system lifecycles utilizing cutting-edge open-source technologies for object detection, object tracking, and activity recognition.

Instituto Superior de Engenharia do Porto (ISEP) Porto, Portugal
Software Engineer and Research Intern *October 2019 - February 2020*

- Collected and prepared video data of hand gestures.
- Developed a prototype web application to train and predict the translation of sign language videos to text.

Centre for Research and Technology Hellas (CERTH) Thessaloniki, Greece
Software Engineer and Research Intern *November 2018 - September 2019*

- Contributed to the research for a multimedia forensics scientific paper.
- Developed and evaluated machine learning 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. (accepted for publication)
- 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++ (intermediate), JavaScript (intermediate), HTML (intermediate), CSS (intermediate), SQL (beginner).
Libraries: PyTorch, Keras, Tensorflow, TensorFlow.js, OpenCV, NumPy, Pandas, Sci-Kit Learn.
Production Tools: Docker, Kafka, RabbitMQ, Git.