

# Deniz Engin

📞 +33769012293 | ✉️ denizengin255@gmail.com

🌐 Website | 🎓 Google Scholar | 🐙 GitHub | 🔗 LinkedIn



## Research Interests

**Specialties** 📌 CV, NLP, Multimodal Learning, Video Understanding, VideoQA

My research primarily focuses on multimodal models, especially in video understanding and VideoQA, leveraging CV and NLP. A significant aspect of my recent work involves the efficient fine-tuning of LLMs, enabling them to adapt to the challenges of VideoQA with minimal supervision and computational power.

## Education

- Sep. 2020 – Jun. 2024 📌 **Inria & University of Rennes** - Rennes, France  
PhD, Computer Science  
Thesis title: Video question answering with limited supervision  
Supervisor: Yannis Avrithis  
Jury members: Ivan Laptev (Reviewer), Matthieu Cord (Reviewer), Josef Sivic, Karteek Alahari, Luce Morin
- Sep. 2014 – Nov. 2017 📌 **Istanbul Technical University** - Istanbul, Türkiye  
M.Sc., Electronics Engineering  
Participated in a 5-month Erasmus exchange program at KU Leuven, Belgium
- Sep. 2009 – Jul. 2014 📌 **Istanbul Technical University** - Istanbul, Türkiye  
B.Sc., Electronics Engineering  
Included a 1-year English language program

## Research and Work Experiences

- Sep. 2020 – Feb. 2024 📌 **PhD Student** Inria – Rennes, France  
Proposed parameter-efficient zero-shot and few-shot VideoQA: Publication [1]  
Proposed a knowledge-based VideoQA method collaboration with InterDigital: Publication [2]
- Sep. 2020 – Jun. 2022 📌 **Researcher** InterDigital – Rennes, France  
Worked on multimodal video understanding projects - Video Captioning and VideoQA: Publication [2]  
2 Patent Applications
- Jan. 2018 – Mar. 2020 📌 **R & D Engineer Specialist** Yapı Kredi Technology – Istanbul, Türkiye  
Developed offline signature detection & verification system: Publication [3]  
Developed multimodal document classification system: Publication [4]
- Jul. 2017 – Sep. 2017 📌 **Research Intern** EPFL Signal Processing Lab (LTS5) – Lausanne, Switzerland  
Cross-Pose Facial Expression Recognition via Transfer Learning: Publication [5]
- Jul. 2016 – Jan. 2018 📌 **Researcher** ITU SiMiT Lab – Istanbul, Türkiye  
Single Image Dehazing via CycleGAN: Publication [6]  
Facial Expression Recognition via Transfer Learning: Publication [7]

## Selected Publications

- 1 **D. Engin** and Y. Avrithis, “Zero-shot and few-shot video question answering with multi-modal prompts,” in *Proc. ICCV Workshops*, 2023. **[Oral Presentation]**.
- 2 **D. Engin**, F. Schnitzler, N. Q. Duong, and Y. Avrithis, “On the hidden treasure of dialog in video question answering,” in *Proc. ICCV*, 2021.
- 3 **D. Engin\***, A. Kantarci\*, S. Arslan, and H. K. Ekenel, “Offline signature verification on real-world documents,” in *Proc. CVPR Workshops*, 2020.
- 4 **D. Engin**, E. Emekligil, B. Oral, S. Arslan, and M. Akpınar, “Multimodal deep neural networks for banking document classification,” in *Proc. IMMM*, 2019. **[Best Paper Award]**.
- 5 **D. Engin**, C. Ecabert, H. K. Ekenel, and J.-P. Thiran, “Face frontalization for cross-pose facial expression recognition,” in *Proc. EUSIPCO*, 2018.
- 6 **D. Engin\***, A. Genç\*, and H. Kemal Ekenel, “Cycle-Dehaze: Enhanced cyclegan for single image dehazing,” in *Proc. CVPR Workshops*, 2018.
- 7 **D. Engin** and H. K. Ekenel, “Facial expression pair matching,” in *Proc. SIU*, 2017.

## Skills

- **Programming and Development Tools:** Python, C, Unix Shell Scripting, SQL, Git, Docker
- **Deep Learning Frameworks:** Pytorch, TensorFlow, Keras

## Languages

- Turkish - Native Proficiency
- English - Full Professional Proficiency
- French - Elementary Proficiency

## Summer Schools & Symposiums

- ICVSS 2022 ■ International Computer Vision Summer School, Sicily, Italy. (10 - 16 Jul.)
- ELLIS 2021 ■ ELLIS Doctoral Symposium, Tübingen, Germany. (27 Sep. - 1 Oct.)
- PAISS 2021 ■ PRAIRIE/MIAI Artificial Intelligence Summer School, Online. (5 - 9 Jul.)

## Awards and Achievements

- 2019 ■ Best Paper Award at IMMM 2019
- 2018 ■ ECCV Woman in Computer Vision Workshop Travel Grant
- 2016-2017 ■ Research Scholarship from National Research & Technical Council of Türkiye
- 2015-2016 ■ Exchange Student Grant by Erasmus Program

## Reviewer Activities

- 2023 ■ CVPR, ICCV
- 2022 ■ ECCV