Michele Tufano

AI/COMPUTER VISION ENGINEER

michele.tufano@wur.nl   +39 334 74 09 720   LinkedIn profile

EXPERIENCE

May 2023 - Present
Research affiliate *Massachusetts Institute of Technology*

- Led the research project to perform data-driven analysis in large dataset, using webscraping, SQL, NLP, BERT, LLM, RAG, and resulting in publication on Nature Foods.

January 2021 – January 2025
Ph.D. Candidate in AI and Computer Vision *Wageningen University and Research*

- Trained and optimized deep learning models (CNN, LSTM, Transformers) for video classification to predict human eating behavior and count eating and drinking events with 96% accuracy.
- Designed and implemented algorithms for video analysis to count bites with 80% accuracy, for object and event recognition using OpenCV, TensorFlow, Keras, YOLO, and Mediapipe key points to track movement in Python, resulting in a publication on Frontiers in Nutrition
- Developed software for video data collection using object-oriented programming in Python and JavaScript and performed dataset annotation using CVAT.
- Supervised MSc student to train CNN and GANs model for emotion detection in children.
- Lecturer for Data Science and Machine Learning course for MSc students in Nutrition and Health

September 2019 – September 2020
Research affiliate and Data Scientist *University of Illinois at Chicago*

- Performed statistical analysis of clinical large dataset in schizophrenia patients using R.

January 2018 – July 2018
Research affiliate *A*Star, Genome Institute of Singapore*

- Performed bioinformatics analysis on SNPs genotyping and GWAS in B-cell lymphoma using bash and Linux

EDUCATION
2021-2025
Ph.D. Degree AI for innovations in eating behavior, Wageningen University and Research
2016-2018
Honors MSc Degree Top Master Biomolecular Sciences, University of Groningen
2013-2016
BSc Degree Biotechnology, Sapienza University of Rome

AWARDS

2023
MIT Visiting Ph.D. Student Senseable City Lab

2023
VLAG Ph.D. Fellowship Wageningen University and Research

2021
Pride and Prejudice Science Slam Award 4TU, Dutch Design Week

2018
Singapore International Pre-Graduate Award A*Star, Genome Institute of Singapore

2018
Master's Honours Programme 'Leadership: making the difference' University of Groningen

SKILLS

Project management, Communication, Leadership, Problem-solving, HTML, CSS, React.js, Typescript, Full-stack developments