Last Updated on 4/1/2024

Kompitselidis Dimos

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EDUCATION

ARISTOTLE UNIVERSITY
UNDERGRADUATE MASTER IN ELECTRICAL AND COMPUTER ENGINEERING
Sep 2019 | Thessaloniki, Greece

SKILLS

PROGRAMMING & TOOLS:

Big Projects:

- Python • KERAS • Pytorch
- Machine Learning Algorithms
- Data Structures • GitHub
- Neural Networks
- Data Analysis • Data Science

Smaller Projects:

- Docker • MATLAB • Reinforcement Learning • Linux • C • C++
- Agile Software Development

COURSEWORK

UNDERGRADUATE

- Artificial Intelligence A-Z 2023: Build 5 AI (incl. ChatGPT) | Udemy
- Machine Learning A-Z™: AI, Python & R + ChatGPT Bonus [2023] | Udemy
- JavaScript30 | Wes Bos
- HTML, CSS, and JavaScript for Web Developers | Coursera

HACKATHON

- IEEEXtreme 16.0 • NASA Space Apps Challenge
- Open Innovation Competition Urban Mobility (**1rst price**)
- Web Test Hackthon by Netcompany-Intrasoft

AWARDS

2018 National
Kangaroo math contest results
2013 National
1st Physics Competition in Greece

WORK

D-cube Immersive Solutions | Machine Learning Research Intern
Mar 2024 – May 2024 | Greece, Thessaloniki

- **Enhanced YOLOv8 Framework**: Integrated a modified YOLOv8 framework with a Detail-Sensitive Path Aggregation Network (DsPAN) and incomporate custom changes to the architecture that increased the accuracy of Yolo by **3%** and **15%** in certain classes in **defect detection.**
- **Synthetic Data Generation**: Utilized Generative Adversarial Networks (GANs) to create synthetic datasets for training, enhancing model performance without large original datasets or high resolution.
- **Dual-Stream Architecture**: Designed and implemented a dual-stream architecture incomporates temporal context for motion detection, enhancing the capability to detect moving objects.

COLLEGE PROJECTS

NEURAL-NETWORKS-CLASSIFICATION | PANDAS, TENSORFLOW

- Created a neural network model to categorize the world's billionaires by wealth bracket and origin.
- Achieved 75% accuracy in wealth classification and 82.29% in distinguishing self-made versus inherited wealth through data preprocessing and customized weights.

DRUG-CLASSFICATION | TENSORFLOW, KERAS, PANDAS

- Developed various machine learning models to recommend appropriate drugs based on patient metrics.
- Highlighted an RBFN from scratch and a customized SVM with over 99% accuracy through data preprocessing, PCA, cross-validation, and comparative analysis.

AI PLAYING GAMES | PYTORCH

- Developed AI agents to play classic games like Pac-Man, Kung Fu, and Lunar Landing using reinforcement learning.
- Applied Deep Convolutional Q-Learning, Asynchronous Advantage Actor-Critic (A3C), and Deep Q-Learning, resulting in AI agents capable of strategic gameplay.

VOLUNTEERING

WEB PROJECT ADMINISTRATOR FOR ESN

- Maintained websites for ESN Thessaloniki and ESN Auth.
- Managed the Google Admin platform for member administration.