### **Cristian Stinga**

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#### **EDUCATION**

## **Bachelor of Applied Data Science & Artificial Intelligence**

Breda University of Applied Sciences (2022 - 2026)

#### **High School Diploma**

"Mircea cel Batran" National College (2018 - 2022)

• Baccalaureate Diploma grades: Mathematics: 9.05/10, Informatics: 9.15/10

### **PROJECTS**

## CV in Plant Phenotyping • Netherlands Plant Eco-phenotyping Centre (NPEC)

Nov 2023 – Jan 2024

- Built and tested computer vision models for identifying plant segments from photos using a neutral network architecture.
- Developed a complete pipeline for analysing plant images, including a root detection, measuring root lengths, and providing junction coordinates.
- Tested virtual environment for automating plant inoculation with a liquid handling robot, developing a wrapper and controllers, laying the groundwork for full automation.
- Achieved an Intersection over Union (IoU) score of 0.8 for a root detection model, exceeding the client's requirement of 0.5
- Delivered a comprehensive technical paper to NPEC, detailing the integration of AI and robotics in plant phenotyping.

### **Emotion Classification System • Banijay Benelux**

Feb 2024 – Apr 2024

- Designed and implemented an advanced NLP system to analyse and classify emotions in TV show content, particularly for "Expeditie Robinson".
- Built a scalable, end-to-end system that converts audio to text and identifies six core emotions utilizing state-ofthe-art NLP techniques.
- Delivered a comprehensive technical report to Banijay Benelux detailing the integration process and including recommendations.

# **AI-Driven Location-Based AR Game**

Sep 2024 – Jan 2025

- AI and AR Integration: Augmented an existing object recognition pipeline (GhostNet V2 + SSD MobileNet V1) by integrating a Unity compatible ONNX fallback model for offline inference, enabling seamless switching between a remote Python API and local inference to ensure robustness in the AR application.
- Gamified Learning: Designed and implemented a leveling-up system tied to educational and exploratory actions to reinforce user engagement.
- Continuous Improvement: Set up a foundational continuous learning pipeline to ensure the model adapts over time as more data becomes available.
- Demo Delivery: Expanded and integrated additional interactive scenes using Unity to develop a functional AR demo APK, showcasing narrative progression for cultural heritage promotion; tested on-site to support stakeholder engagement and feedback.

### TECHNICAL SKILLS

**Programming languages**: Python (preferred), R, C++

Data Analysis: Power BI, Matplotlib

Data Science & AI: Pandas, NumPy, SQL, Scikit learn, TensorFlow, Keras, PyTorch, OpenCV, SpaCy, NLTK,

Cloud: Azure ML, Docker, Weight & Biases

Other Technologies: Visual Studio Code, Git, GitHub, Anaconda, Azure DevOps, LaTeX, MS Office

### **ACCOMPLISHMENTS**