



ZiuZ Visual Intelligence

Technische Informatici (Technische Informatica), Life Science (Biologie en Medisch Laboratoriumonderzoek, Chemie)

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ZiuZ, located in Gorredijk, specializes in developing products that use visual technology. As its goal, ZiuZ wishes to make a global impact through innovative, visual intelligence-based solutions that contribute toward solving problems in society.

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Use of AI/ML to classify data from video and chat communication

One of the many responsibilities of law enforcement agencies is to investigate the potential abuse of children. An important part of these investigations is viewing, analyzing, and evaluating large quantities digital materials, such as chat communication, images and videos. ZiuZ's forensic software helps investigators deal with this material in the most efficient and effective way, concentrating on new and unknown material that often contains important clues to identify and save victims and find and arrest perpetrators.

This assignment focuses on the detection and classification of information in the digital materials that are part of an investigation – this may include recognition of spoken and written communication as well as movements and gestures from videos. The application of machine learning algorithms offers the opportunity to quickly gain insights into the facts of the case and context around it.

The assignment

Develop a machine learning algorithm capable of classifying data from digital media, focusing either on chat logs (text), spoken language (audio) or movement information from video footage.

Expected end result

Build, train, validate and demonstrate an algorithm capable of classifying information from digital media in accordance with the requirements of law enforcement agencies.

Note: this assignment does not require students to work with the sensitive and confidential material from law enforcement investigations.

What do we expect from you?

- Currently studying computer science with a focus in artificial intelligence (master's program)
- Experience with machine learning and in particular natural language processing algorithms or video analysis algorithms
- Hands-on approach to designing and developing technical solutions
- Curious demeanor
- Self-starting independent worker
- Team player eager to share learnings