

Project Title: Real-time Visualization of Image Streams from Social Media

Project Description:

Social media platforms such as Twitter contains valuable information potentially useful for a variety of real-world applications such as situational awareness during natural and human-induced disasters. However, social media data is often noisy, i.e., full of irrelevant and duplicate content. Finding useful information on social media is like finding a needle in a haystack. This project aims at developing a web application to visualize image streams processed and classified by the AIDR system during disasters. The AIDR system uses machine learning techniques to process social media images in real-time. The application will offer a variety of filters to allow an easy search of thousands of images collected over several days and weeks. Moreover, the application will provide an option to show a live stream of images.

Duties/Activities:

- Design and develop an Elasticsearch database
- Develop a web application to implement business logic
- Develop a front-end to visualize images and offer various filtering options

Required Skills:

- Web application development in Java
- Front-end development in Vue JS or other Javascript frameworks
- Databases (Elasticsearch experience is a plus)

Preferred Intern Academic Level: Any

Learning Opportunities:

Interns will learn:

- Web application development for a real-world use
- Elasticsearch database design and development
- Interaction with a machine learning system

Expected Team Size: 2

Mentors:

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