



**Dipartimento
Meccanica
Matematica
Management**

MUR
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di Eccellenza
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Research project

Name and Surname: Michele Gattullo

Title: Optimization of Authoring for Industrial Augmented Reality Interfaces

Description:

Reliable technical documentation ensures safety in maintenance, assembly, and training. Traditional manuals often use dense text and complex images, making instructions hard to follow. Augmented Reality (AR) for technical documentation enhances procedural guidance, improving document analysis and decision-making. However, its development requires specialized skills, limiting adoption. Clear guidelines and case studies are needed to help non-experts create effective AR documentation. There is no agreed best practice for AR instructions, as effectiveness depends on context. Our research establishes guidelines for next-gen AR documentation, optimizing instruction templates to enhance clarity, efficiency, and cost-effectiveness. We aim to improve operator performance while reducing development costs. We validate our solutions through case studies in laboratory and real work environments, using task time, accuracy, and eye-tracking data, along with usability, cognitive load, and user experience. Our insights enable non-experts to author effective AR documentation for industrial use.

Candidates should provide detailed CV

Contacts

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