## Harnessing Artificial Emotional Intelligence for Improved **Human-Computer Interactions**

Part of the Advances in Computational Intelligence and Robotics Book Series

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## **Description:**

Industry 5.0 is poised to redefine the collaboration between humans and machines, marking a crucial moment in technological evolution. However, as we stand at the threshold of this transformative era, a critical challenge emerges - the integration of emotional intelligence into the industrial landscape. Organizations grapple with the urgent need to understand, strategize, and ethically deploy artificial emotional intelligence (AEI) in Industry 5.0. This pivotal juncture calls for a comprehensive resource that explores the theoretical foundations but offers practical insights into the applications, challenges, and responsible deployment of AEI.

The absence of a cohesive guide addressing the intricacies of AEI in Industry 5.0 leaves a void in academic scholarship. Organizations, researchers, and policymakers lack a singular, authoritative source to navigate the complexities of emotional intelligence integration, impacting Industry 5.0 strategies, sustainability plans, and customer services. The challenge lies in managing the delicate balance between human and machine collaboration while ensuring ethical considerations are at the forefront of AI deployment. As the demand for emotional intelligence in the industrial landscape intensifies, the need for a unifying resource becomes increasingly apparent.

Harnessing Artificial Emotional Intelligence for Improved Human-Computer Interactions is an innovative book crafted by leading researchers and practitioners across disciplines that serves as the solution to the challenges posed by the AEI revolution. By offering a comprehensive exploration of emotion recognition, affective computing, and human-robot interaction, the book equips readers with the knowledge needed to navigate the complexities of AEI in Industry 5.0. With a focus on practical implementations, ethical considerations, and the real-world impact on factories, collaborative robotics, and industrial automation, this book positions itself as the go-to resource for scholars, industry professionals, and decision-makers seeking to harness the transformative power of emotional intelligence in the Fifth Industrial Revolution.

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## **Topics Covered:**

- AEI and Human-Robot Safety
- AEI and Worker Well-being in Smart Factories
- AEL in Customer Service
- Emotion Recognition in Human-Machine Interaction
- Emotionally Intelligent Decision-Making in Industry 5.0
- Enhancing Human-Robot Collaboration through Emotional Intelligence

Ethical and Privacy Considerations in AEI Deployment

- Future Trends and Challenges in AEI for Industry 5.0
- Human-AEI Collaboration in Industry 5.0
- Human-Centered Design and User Experience in AEI Systems
  - Industry 4.0 to Industry 5.0 Shift Through
  - Emotional Intelligence

Subject: Computer Science & Information Technology

Readership Level: Advanced-Academic Level (Research Recommended)

Classification: Edited Reference

**Research Suitable for:** Advanced Undergraduate Students: Graduate Students: Researchers: Academicians: Professionals: Practitioners

