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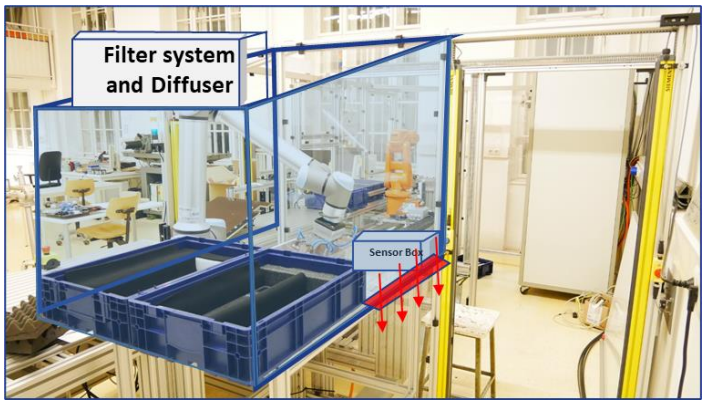

Master Thesis
Masterarbeit

Ausschreibung Graz, 07.12.2021

Simulation and process monitoring for modular cleanroom development

Aufgabenstellung / Description

Developing and maintaining cleanrooms consume a considerable amount of energy, and thence costs, in an industry. To counter this, at this project, we are developing a modular cleanroom strategy. Until now, a prototyped working model of the HEPA filtering & sensory system (based on Arduino IDE and Python) has been developed.

To enhance this development, further techniques such as simulation and process monitoring are necessary. The following tasks will be the scope of this work:

1. Modify the existing sensory system to Rasberry pi IDE
2. CFD Simulation (eg., air flow) of the cleanroom process according to the set standards and sensor placing
3. Cleanroom process monitoring and control network via installed sensors
4. Addition or modification (process improvement) of sensory system based on simulation results.

Ich freue mich auf Ihre Anfragen!

Organisatorisches

Ort	Institut für Fertigungstechnik
Beginn	ab sofort
Dauer	ca. 3-6 Monate
Vergütung	€ 3000,- (+ €500,- Prämie)
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