**CURRICULUM VITAE  
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Name **Prof. dr. ing. Johannes Cottyn**

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 Date of Birth 8/7/1981 (Kortrijk)

Nationality Belgium

Dept. Industrial Systems Engineering and Product Design (EA18)

Ghent University - Faculty of Engineering and Architecture

Campus Kortrijk, Graaf Karel de Goedelaan 5, 8500 Kortrijk

**Research Expertise**

Expertise in industrial informatics, flexible automation concepts and 3D digital modelling for assembly/production systems:

* Operator support systems
* Manufacturing Execution Systems
* Semantic manufacturing operations data modelling and integration
* Virtual commissioning of industrial control systems and strategies
* Assembly Flexibility Assessment
* Industrial security

**Education Background**

**2006 – 2012 Doctor in Industrial Engineering and Operations Research (UGent, Belgium)**Thesis: *Design of a Lean Manufacturing Execution System Framework*

**2004 – 2006** **Predoctoral study in Computer Sciences (UGent, Belgium)**

Thesis: *Automatic Classification of Carpet Wear through Ordinal Regression of 3D Laser Data*

**2003 – 2004 Additional study on Informatics (KU Leuven, Belgium)**

**1999 – 2003 Master in Industrial Automation (Howest, Belgium)**

Thesis: *Study and Application of the Possibilities of the CP 343-1 IT module*

**Work Experience**

**CORE LAB MANAGER ISyE-UGENT @Flanders Make** 2017 - Now

**ASSISTANT PROFESSOR IN AUTOMATION @UGent** 2013 - Now

**AUTOMATION COORDINATOR @XiaK-UGent** 2013 - Now

**RESEARCH ASSISTANT IN AUTOMATION @Howest** 2006 - 2013

**TEACHING ASSISTANT IN AUTOMATION (50%) @Howest** 2004 - 2006

**Running Research Projects (2019)**

* FM-ICON OperatorKnowledge, “Automated Creation of Digital Assembly Instructions by Operator Driven Knowledge Capturing” (2018-2019)
* FM-SBO Flexas-VR, “Design Framework for Flexible Assembly with Operator VR Validation” (2018-2022)
* FM-INFRA InfraFlex, “Infrastructure for Flexible Assembly and Disassembly of Medium-sized Products” (2019-2021)
* EFRO GTI 2 M&M, “Co-creation within the Competence Center for Machine Building and Mechatronics” (2019-2021)
* Industry 4.0 ICI4.0 - Innovative Cybersecurity Solutions (2019-2021)
* Industry 4.0 MES4SME – Manufacturing Execution Systems for Small and Medium-sized Enterprises (2019-2021)

**Recent Publications (last 3 years)**

* Costa Mateus, J., Claeys, D., Limère, V., Cottyn, J., & Aghezzaf, E.-H. (**2019**). A structured methodology for the design of a human-robot collaborative assembly workplace. INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY.
* Hoedt, S., Claeys, A., Schamp, M., Van Landeghem, H., & Cottyn, J. (**2018**). Countering the forgetting effect in mixed-model manual assembly. IFAC PAPERSONLINE (Vol. 51, pp. 856–861). Presented at the 16th IFAC Symposium on Information Control Problems in Manufacturing (INCOM) , Elsevier BV.
* Claeys, Arno, Hoedt, S., Schamp, M., Van Landeghem, H., & Cottyn, J. (**2018**). Ontological model for managing context-aware assembly instructions. IFAC PAPERSONLINE (Vol. 51, pp. 176–181). Presented at the 16th IFAC Symposium on Information Control Problems in Manufacturing (INCOM) , Elsevier BV.
* Schamp, M., Hoedt, S., Claeys, A., Aghezzaf, E.-H., & Cottyn, J. (**2018**). Impact of a virtual twin on commissioning time and quality. IFAC PAPERSONLINE (Vol. 51, pp. 1047–1052). Presented at the 16th IFAC Symposium on Information Control Problems in Manufacturing (INCOM) , Elsevier BV.
* Costa Mateus, J., Aghezzaf, E.-H., Claeys, D., Limère, V., & Cottyn, J. (**2018**). Method for transition from manual assembly to Human-Robot collaborative assembly. IFAC PAPERSONLINE (Vol. 51, pp. 405–410). Presented at the 16th IFAC symposium on Information Control Problems in Manufacturing (INCOM), Amsterdam, The Netherlands: Elsevier Science.
* Bauters, Karel, Cottyn, J., Claeys, D., Slembrouck, M., Veelaert, P., & Van Landeghem, H. (**2018**). Automated work cycle classification and performance measurement for manual work stations. (A. Sharon, Ed.)ROBOTICS AND COMPUTER-INTEGRATED MANUFACTURING, 51.
* Bauters, Karel, Cottyn, J., & Van Landeghem, H. (**2018**). Real time trajectory matching and outlier detection for assembly operator trajectories. In P. Gerril (Ed.), Proceedings of 16th the International Industrial Simulation Conference. Presented at the Internation simulation conference, Eurosis.
* Hoedt, S., Claeys, A., Van Landeghem, H., & Cottyn, J. (**2017**). The evaluation of an elementary virtual training system for manual assembly. (S. Ragupathy, Ed.)INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH.