Dipl.-Ing. Clemens Hollenstein, BSc

Krenngasse 17 8010 Graz Österreich

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born: 7. Oktober 1989



Education

since 02/2018

Graz University of Technology

- Doctoral studies in Electrical Engineering
- Elective: Automation and Control Systems
- Thesis: Modelling and control of fixed-bed biomass gasification systems

11/2014 - 06/2017

Graz University of Technology

- Master of Science in Electrical Engineering and Business
- Elective: Automation and Control Systems
- Thesis: Development of a Model-Based Control for the Synthesis of Mixed Alcohols from the Product Gas of a Biomass Gasifier

10/2010 - 11/2014

Graz University of Technology

- Bachelor of Science in Electrical Engineering
- Elective: Automation and Control Systems
- Thesis: Arduino based control of an inverted pendulum

09/2004 - 06/2009

Secondary technical college of Electronics, Rankweil

- Elective: Electronics
- A-levels

Publications

05/2022

Conference Proceedings + Poster - 1st author

Hollenstein C., Zemann C., Martini S., Gölles M., Felsberger W., Horn M.1,2., Increased Flexibility of A Fixed-Bed Biomass Gasifier through Advanced Control, Proceedings of the 30th European Biomass Conference and Exhibition, ETA-Florence Renewable Energies, 2022, 09-12 May 2022, 704-711

07/2020

Conference Proceedings + Poster - 1st author

Hollenstein C., Zemann C., Martini S., Gölles M., Felsberger W., Antolini D., Patuzzi F., Baratieri M., Horn M.1,2., Evaluation of the transient behaviour of a fixed-bed biomass gasifiers for demandoriented electricity production, Proceedings of the 28th European Biomass Conference and Exhibition, ETA-Florence Renewable Energies, 2020, 06-09 June 2020, 464-476

Journal Paper - 2nd author 11/2019

> Antolini, D.; Hollenstein, C.; Martini, S.; Patuzzi, F.; Zemann, C.; Felsberger, W.; Baratieri, M. & Gölles, M., Assessment of the Behaviour of a Commercial Gasification Plant During Load Modulation and Feedstock Moisture Variation, Waste and Biomass Valorization, Springer Science and Business Media LLC, 2019

05/2019 **Conference Proceedings + Poster - 1st author**

> Hollenstein, C.; Zemann, C.; Antolini, D.; Patuzzi, F.; Martini, S.; Baratieri, M. & Gölles, M., Evaluation of the Operational Behaviour of Fixed-bed Biomass Gasifiers - A Novel Approach for Steady-state Analysis, Proceedings of the 27th European Biomass Conference and Exhibition, ETA-Florence Renewable Energies, 2019, 27-30 May 2019, 849-860

Professional Experience

Bioenergy and Sustainable Technologies GmbH, Graz since 11/2016

Fulltime researcher and PhD student

Automation and control

Former Bioenergy2020+ GmbH (Junior Researcher)

03/2015 - 09/2016 **NXP Semiconductors, Gratkorn**

Freelance worker in RFID and NFC

Laboratory, measurement test setup, 10-hour workweek

03/2013 - 01/2015 **Graz University of Technology**

Tutor at the Institute for Technical Informatics

Technical Informatics Exercises 1 & 2, 4-hour workweek

07/2009 - 08/2010 Bodemann GmbH, Dornbirn,

Fulltime hard- and software engineer

Developing, building and controlling sewer (pipe) robots

07/2006 - 09/2014 **Summer internship**

Freelance worker at clever², apprenticeship training (Meusburger)

Hans Künz GmbH, Hardware engineering (Solid Works)

SIE system electronic, software technology analysis (HMI)

Leica Geosystems, software engineering (Standard C)

Bodemann GmbH, hard and software engineering (Visual Basic)

Julius Blum GmbH, layout design and production (Reports)

Zumtobel Lighting Group, (shift work) assembling

Vorarlberger Kraftwerke AG, maintenance and field engineering

Skills

Languages German (mother tongue), English (B2)

Matlab (expert), Standard C (basic), Visual Basic (basic) ΙT

MS Office, Latex

Hobbies Ultimate Frisbee, mountaineering, running, traveling

Graz, 12. September 2022