

Nationality: German
Profession MSc Mechanical Engineer
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Mechanical engineer with excellent skills in developing, designing, simulating and optimizing lightweight structures

Cotesa Mittweida, Germany <i>Development Engineer</i> October 2024-April 2025	<ul style="list-style-type: none">• Design and process engineering of aerospace parts and tools• Developed event based time tracking software to measure processing times• Developed safety concepts for process and manufacture
Hörmann Vehicle Engineering Dessau, Germany <i>Design Engineer</i> August 2023-January 2024	<ul style="list-style-type: none">• Design engineering of lightweight components for rail vehicles
German Institute Guatemala Guatemala City, Guatemala <i>Instructor</i> January 2022-December 2022	<ul style="list-style-type: none">• Educating students in science and engineering fundamentals
Private customers Berlin, Germany <i>Data Engineer</i> October 2020-October 2021	<ul style="list-style-type: none">• Various data processing and automation projects with Python and MS Excel• Included programs for data aggregation, analysis and processing
EconCore / KU Leuven Leuven, Belgium <i>R&D Engineer</i> August 2019-October 2020	<ul style="list-style-type: none">• Research and development in honeycomb core and sandwich technology• Including design, simulation, testing, application of 3D-print technologies
Private customers Berlin, Germany <i>Data Engineer</i> September 2018-July 2019	<ul style="list-style-type: none">• Various data processing and automation projects with Python and MS Excel• Included programs for data aggregation, analysis and processing
RUAG Space Zurich, Switzerland <i>Design Engineer</i> May 2018-August 2018	<ul style="list-style-type: none">• Designed handling concepts and tools for VULCAN and ATLAS V launch vehicles
Center for Composite Materials Newark, Delaware, USA <i>Design Engineer</i> October 2016-December 2017	<ul style="list-style-type: none">• Design engineering of lightweight automotive door; established FEM models• Close collaboration with the simulation department for optimal design• Participated in the execution and evaluation of feasibility studies
Center for Composite Materials <i>Process engineer</i> April 2015-October 2015	<ul style="list-style-type: none">• Developed composite thermoforming of automotive B-pillar• Submitted patent application• Guidance of assistants
Institute of Lightweight Structures Chemnitz, Germany <i>R&D Engineer</i> February 2014-December 2014	<ul style="list-style-type: none">• Wrote an optimization algorithm for finding ultra-light design concepts• Optimized the layup design of carbon fiber composite laminates• Modeled and simulated composite and hybrid parts with FEM• Instructed staff in modeling of composite parts in FEM software
Fraunhofer Institute Stuttgart, Germany Robot and Assistive Systems <i>Design Engineer</i> July 2013-September 2013	<ul style="list-style-type: none">• Designed and simulated components in a lightweight robotics project

Deutsche Bahn AG

Berlin, Germany

Quality/Technology Department

Management assistant

October 2011-January 2012

- Took part in the development and implementation of standards referring to maintenance and repair with enterprise-wide validation
- Project management assistance of the project leader

Education

- B.Sc. in Mechanical Engineering from TU Berlin
- M.Sc. In Lightweight Engineering from TU Chemnitz, design & simulation track
- Relevant coursework included: lightweight design and technologies, composite materials, sandwich, FEM, modeling, optimization, tooling, fatigue, 3D printing
- Evaluated as belonging to the best 10% of the class
- Thesis works:
 - Weight optimization of truss frames
 - Composite thermoforming of a crash loaded automotive component

Qualifications

- Proficient in CATIA (incl. CPD, CPE, CPM), SolidWorks, Inventor, Abaqus, Matlab, Python, Hypermesh, Solid Edge, C/C++, R, Ansys APDL, Mathcad, HTML, LaTeX, MS/Open Office
- Language skills: German, English, French, Spanish

Other

- Established various Raspberry Pi server projects.
- Tutoring, mentoring & teaching students in math and physics
- Military service in the Bundeswehr (German army) 2005-2006
- Backpacking through the middle east and volunteer service in Israel 2006-2007

Hobbies

- Drones, blockchain, home server tech
- Playing drum set
- Doing walks, soccer, water activities
- History, Biographies, Anthropology

Links

- Homepage: www.dossmann.me
- LinkedIn: www.linkedin.com/in/jonasdossmann
- GitHub: www.github.com/dossmann

References

- Jerome Rossol Cotesa GmbH 03727 9985 2849
- John Tierney, PhD Center for Composite Materials +1 302 584 5581