



Tommy Umbreit

Graduate Engineer,
Borned in 1984, Married, 2 Sons,
15 years of professional experience

Nuremberg Metropolitan Region, Germany

info@tousm-conneering.com

LANGUAGES

German	Native
English	Fluent

IT & Software Skills

- Operating Systems (Linux, Windows)
- Visualization Tools (MS Office, Python Streamlit, Tableau)
- Analysis & Automation Software (MATLAB, Squish GUI Testing, Diadem)
- Data Science Frameworks (Matplotlib, Streamlit, Sklearn)
- Programming (Python, SQL, bash, Batch)
- Collaboration and Revisioning ([Github](#), Gitlab, Git)
- PLM Software (Polarion, onePLM)
- CAD/CAE/FEM Tools (Creo/ProE, Ansa, Abaqus, LS-Dyna, Ansys, Animator, Hyperworks, Meta, Optimus, LS-Opt)

KEY Projects

Additional Training

DATA SCIENCE. INSTITUTE by Fabian Rappert | 12.2024 – 05.2025

- Data Visualization and Business Intelligence
- SQL Databases (advanced techniques and projects)
- Python Programming (Webscraping, API development, Object-Oriented Programming)
- Machine Learning (Supervised & Unsupervised Learning, Practical ML Projects)
- Agile Methods (Scrum), Git/GitHub, Docker, Statistics

Test Engineer

OEM medical field | 09.2018 – 05.2025

- Hardware & Software Testing, Automation using Linux scripting and Squish GUI Testing in Python environment
- Test Data Analysis with MATLAB
- Requirment verification and FDA-compliant documentation
- International team stacked with US, Indian and German colleagues

CAE/FEM Specialist

OEM automotive | 02.2022 – 06.2022

- Validation and adjustment of full vehicle crash models based on sensor data
- International team stacked with Chinese and German colleagues

EDUCATION

Diploma in Industrial Engineering
/ Mechanical Engineering
University of Applied Sciences
Kempten
10.2005 – 01.2011

ADDITIONAL TRAININGS

Data Science (2024–2025)
MATLAB Simulink for Automotive
Applications (2015)
Various CAE and Project
Management Training Courses
(2011–2015)

INTERNATIONAL EXPERIENCE

One trimester of study at
International Collage of
Management (ICMS) in Sydney
Australia as part of degree
program

VOLUNTARY WORK

Workgroup Kids and Youth
Deutsche Initiative Mountainbike
aka DIMB
02.2022 – present
Kids technic training
Kids rides
Kids events

Test Engineer

OEM medical field | 09.2019 – 02.2021

- Design and implementation of environmental test setups for requirement testing of prototypes
- Coordination of testing activities internally
- Evaluation of test results in Diadem
- Requirement verification and MDR-compliant documentation

Task Force Engineer

Porsche AG project for Tier1 supplier | 09.2019 – 02.2020

- Quality improvement measures and RFT quota optimization of kinematic car components

Verification and CAE Engineer

Porsche AG project for Tier1 supplier | 02.2016 – 02.2019

- Writing design verification plans (DVP) based on requirements
- Managing service providers for testing and CAE
- Development and validation of kinematic car components under environmental conditions
- International team stacked with French, Slovak and German colleagues

Verification Coordinator

BMW AG project for Tier1 supplier | 03.2017 – 04.2018

- Development of design verification plans (DVP)
- Coordination of tests
- International team stacked with US and German colleagues

CAE Simulation Engineer

Daimler AG project for Tier1 supplier | 03.2013 – 12.2015

- Development of side crash simulations for door panels
- Automation of CAE post-processing
- Building material data libraries
- International team stacked with Japanese and German colleagues

CAE Specialist

Tecosim | 01.2011 – 03.2013

- Full vehicle crash simulations for BMW
- Automation and optimization of simulation and verification processes