





JULIAN MACHNITZKE



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[Julian Machnitzke](#)

ABOUT ME

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| DOB | 10.07.1996 |
| HOBBIES | Reading, Cooking Travelling and Experiencing new Cultures Running, Climbing and Skiing |

EDUCATION

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|-------------|--|
| 2024 – NOW | Environmental Engineering (M.Sc.) TECHNICAL UNIVERSITY OF MUNICH |
| THESIS | Dynamic Identifiability Analysis of a Hydro-Glaciological Model: Evaluating SWAT-GL for differing Glaciers. (1.0) |
| GRADE | after 111/120 ECTS 1.5 |
| 2021 – 2022 | Environmental Systems and Sustainability (M.Sc.) LUDWIG MAXIMILIANS UNIVERSITY MUNICH |
| GRADE | after 48/120 ECTS 1.7 |
| 2021 | Summer School - Kyrgyzstan: Hydropower, Ecology and Hydro Morphology GERMAN ACADEMIC EXCHANGE SERVICE (DAAD), KYRGYZ STATE TECHNICAL UNIVERSITY (KSTU) |
| GRADE | 1.0 |
| 2015 – 2020 | Environmental Engineering (B.Sc.) TECHNICAL UNIVERSITY OF MUNICH |
| THESIS | Hydrological Characterization and Plant-Water Relations in Andean Forests and Paramo Ecosystems. (2.7) |
| GRADE | 2.8 |

SKILLS

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|-----------|--|--------|
| CODING | Python | ●●●●○ |
| | Matlab | ●●●○○ |
| | R | ●●○○○ |
| MODELLING | SWAT/SWAT-GL | ●●●●○ |
| | HEC-RAS | ●●●○○ |
| | 3Di-Model | ●●●○○ |
| LANGUAGES | German | NATIVE |
| | English | C1 |
| | Spanish | B2 |
| OTHER | VS Code, LaTeX, Google Earth Engine, web development, CDO-tool Github, GIS, Remote Sensing | |

WORK EXPERIENCE

SEP 2022 – MAR 2023
Neelen & Schuurmans, Utrecht
Intern: Water Consultant
Set up a 3Di hydraulic model for a hilly Bavarian catchment.

MAR 2020 – JUN 2020
Technical University of Munich, Chair of Hydrology and River Basin Management, Munich
Research Assistant
Set up a HEC-RAS Model for a river section in the Naryn catchment, Kyrgyzstan, for the ÖkoFlussPlan project.

OCT 2021 – FEB 2022
Technical University of Munich, Chair of Hydrology and River Basin Management, Munich
Assistant Lecturer
Tutored a SWAT modeling class.

APR 2020 – JUN 2020
EDR GmbH, Munich
Working Student: Water Engineer
Built a hydraulic model for a segment of the River Maisach using SMSio for HYDRO AS 2D to develop flood hazard maps.

SEP 2017 – OCT 2017
Ionicon Analytik GmbH, Innsbruck
Intern: Mechatronics Assembler
Assembled components of Proton Transfer Reaction Mass Spectrometers.

MAR 2017 – JUN 2017
Baywobau Baubetreuung GmbH, Munich
Construction Manager
Supervised construction activities and conducted formal handovers of real estate property.

OCT 2017 – PRESENT
Wirtshaus Goerreshof, Munich
Waiter
Worked as both waiter and bartender.

PUBLICATIONS

2024 Schaffhauser, T. et al.: Merits and Limits of SWAT-GL: Application in Contrasting Glaciated Catchments, Hydrol. Earth Syst. Sci. Discuss. preprint, in review, <https://doi.org/10.5194/hess-2024-89>.

