




# JULIAN MACHNITZKE



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## ABOUT ME

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

## EDUCATION

2024 – NOW	<b>Environmental Engineering (M.Sc.)</b> 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	<b>Environmental Systems and Sustainability (M.Sc.)</b> LUDWIG MAXIMILIANS UNIVERSITY MUNICH
GRADE	after 48/120 ECTS 1.7
2021	<b>Summer School - Kyrgyzstan: Hydropower, Ecology and Hydro Morphology</b> GERMAN ACADEMIC EXCHANGE SERVICE (DAAD), KYRGYZ STATE TECHNICAL UNIVERSITY (KSTU)
GRADE	1.0
2015 – 2020	<b>Environmental Engineering (B.Sc.)</b> TECHNICAL UNIVERSITY OF MUNICH
THESIS	Hydrological Characterization and Plant-Water Relations in Andean Forests and Paramo Ecosystems. (2.7)
GRADE	2.8

## SKILLS

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>.

