DR. BENEDIKT KLEINMEIER



Computer scientist / Passion for good software / Interested in hardware and physics

CONTACT

- kleinmeier.benedikt@gmail.com
- Projects
- Github
- **Publications**

SKILLS

Programming languages

Assembler (x86, TriCore)

Bash

C

C++

C#

Java

JavaScript

Pvthon

Markup languages

HTML/CSS

LaTeX

Operating systems

Linux

MacOS

Windows

Software and tools

Visualization

(e.g. matplotlib, gnuplot, ...)

Data handling/analysis

(e.g. numpy, pandas, ...)

Docker

Office

Process models

ISO26262, Scrum, V model

Development techniques

Continuous integration, test-driven development

Languages

German

English



AWARDS



2019

TUM Graduate School Internationalization



2010

Nomination scholarship program I.C.S.



Best graduate junior high school

WORK EXPERIENCE



since 07/2021

◊ Infineon Technologies AG, Neubiberg

Principal software engineer for in-house and customer tools

- SDK and GUI development (PyQt) of radar applications to configure radar sensors, acquire and visualize data.
- Improving an Eclipse-based application to operate lab equipment and to manage cryptographic keys.
- Development of a Python-based workflow engine including a web dashboard to automatically process customer orders.
- Development of a GUI application (Swing) to control SPICE simulators and to examine simulation results.

C++ Java Python PyQt Eclipse/SWT plotly/dash

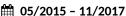


12/2017 - 05/2021

♦ Hochschule München / Technical University Munich / University of Sussex, Munich / Brighton

- Modeling and simulation of pedestrians and their behavioral changes.
- Implementation and simulation in our own open-source simulator Vadere (www.vadere.org).
- GUI programming in Java and data analysis using Python with a focus on test-driven development and continuous integration.





♀ Infineon Technologies AG, Neubiberg

Expert firmware developer

- Development of bootstrap loaders and startup code for various microcontrollers in C.
- Establishing systematic unit testing to meet ISO 26262 requirements.



STUDIES

10/2012 - 01/2015

♀ Hochschule München, Munich

Computer science (M.Sc) — embedded systems focus

- Master thesis at Fraunhofer ESK: Development of a software solution for highly accurate time and position detection for Car2X scenarios
- Focus: Driver development under GNU/Linux in C

C	:	C++
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10/2008 - 09/2012

♀ Hochschule München. Munich

Computer science (B.Sc)

- Bachelor thesis at Infineon Technologies AG: Development of an evaluation tool for barometric air pressure sensors
- Focus: Firmware development for 8- and 16-bit microcontrollers in C and PC software in C#/.NET



ACTIVITIES BEFORE STUDIES

1 03/2008 - 09/2008

♥ SEP AG (backup software), Weyarn

Support staff

 Setting up test environments (Windows, GNU/Linux), software testing, maintaining user documentation.

GNU/Linux | Windows | Documentation

11/2007

♥ Caritas St.-Anna-Haus, Holzkirchen Community service worker in retirement home

Number and become in a

· Nursing and housekeeping

SCHOOL

2004 - 2006

♥ Technical secondary school and vocational secondary school, Bad Tölz Focus: Economy and management

Two internships: local bank (departments: human resources, accounting, credit) and district office Miesbach

2000 - 2004

9 Junior high school, Miesbach

1994 - 2000

♀ Elementary school, Weyarn

PUBLICATIONS

Peer-Reviewed journal articles:

- Benedikt Kleinmeier, Gerta Köster, and John Drury. "Agent-Based Simulation of Collective Cooperation: From Experiment to Model". In: Journal of the Royal Society Interface 17 (171 2020), p. 20200396. ISSN: 1742-5662. DOI: 10.1098/rsif.2020.0396. URL: https://arxiv.org/abs/2005.12712
- Benedikt Kleinmeier et al. "Vadere: An Open-Source Simulation Framework to Promote Interdisciplinary Understanding".
 In: Collective Dynamics 4 (2019). DOI: 10.17815/CD.2019.
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April 25, 2025

Benedikt Kleinmeier

HOBBIES



MY PHILOSOPHY

 Joy of learning: That's why I have been learning to play the piano autodidactically.



 Work-life balance and nature: For this reason, I have crossed the alps with my mountain bike.





