
DR. JULIUS SCHULZ

* 24. April 1986



julius.schulz@juliusschulz.de **Work Experience**

Munich

Software Engineer, Bertrandt AG — 2016–present

Software and Algorithm Development for Driver Assistance System ECUs in C and Matlab/Simulink. Focus: Processing of Navigation Data. Experience with in-car testing (**test driver qualification**) and data analysis (**Vector Canape**).

Tooling for Simulation and Data Visualisation (**Python**).

Experience with agile Development (**Scrum**). Deputy Team Leader.

Research assistant, Netz group, FU Berlin und TU Munich — 2010–2016

Stochastic Modeling (i.a. **Hidden Markov Models**) of dynamic processes in proteins. Programming of simulations and statistical data analysis.

Teaching assistance (electronics course and numerics)

Volunteer, Federal Agency for Technical Relief / THW — 2010–2016

Emergency Response Unit. Specialisation in technical search.

Student scientist, Netz group, TU Munich — 2007

Development of Monte Carlo simulations of confined electrolytes

Education

PhD in physics, FU Berlin — Disputation 09/2015

Dissertation: „Internal Friction in Peptide Kinetics“

Diploma studies in physics, TU Munich — 10/2004–04/2010

Diploma thesis: „Structure and phase behaviour of electrolytes in confined geometries“

KTH Stockholm — 07/2007–12/2007

Studies abroad (Erasmus stipend)

Humboldtoberschule Berlin-Tegel (Gymnasium) — Abitur, 1996–2004

Skills

C/C++, **Matlab/Simulink**: Developing Driver Assistance Systems

Python: Tooling Development, Data analysis

Linux/Unix: intensive use during PhD (HPC Clusters)

Vector Canape: Data analysis for Driver Assistance Systems

Rational DOORS: Requirements Engineering and Documentation

Lauterbach Debugger: Debugging at HiLs and in car

Other: BMW E1 test driver qualification, ISTQB foundation level

Languages

German (native), English (fluent), French (school level), Swedish (basics, B1),

Urdu/Hindi (basics, started recently)
