Klaus Bogenberger

Curriculum Vitae

Professor of Traffic Engineering and Control
Technical University of Munich (TUM)
Arcisstraße 21
80333 München

Email
klaus.bogenberger@tum.de

Private

Date of Birth	26th February 1971 in Vilshofen a.d. Donau
Nationality	German

Education

7/2001	**Dissertation** "*Adaptive Fuzzy Systems for Coordinated Traffic Responsive Ramp Metering*" (Dissertation and Oral Examine in English) Supervised by Prof. Hartmut Keller and Prof. Stephen G. Ritchie, University of California at Irvine *Grade: „summa cum laude"*
1999	**Visiting Scholar** at the Institute for Transportation Studies of the **University of California at Berkeley** Official Host: Prof. Carlos Daganzo worked/published together with Prof. Dolf May and Prof. Lofti Zadeh.
12/1996 – 8/2001	**Research Associate** at the Fachgebiet Verkehrstechnik und Verkehrsplanung of **TUM**
1991 - 1996	**Diploma in Civil Engineering @ TUM** *(Grade: 1,6)* Special Courses in: - Transportation and City Planning (Prof. Kirchhoff; Prof. Keller) - Road, Rail and Airfield Construction (Prof. Eisenmann; Prof. Leykauf)
1977 - 1990	Elementary School and Gymnasium Vilshofen

Professional Experience

1/2020 -	***Technical University of Munich (TUM)*** – Full Professor for Traffic Engineering and Control
1/2012 – 12/2019	***University of the Federal Armed Forces Munich*** – Full Professor for Traffic Engineering and Control
8/2008 – 12/2011	***TRANSVER GmbH*** - Managing Director (Traffic Engineering and Planning Company in Munich and Hannover with about 25 engineers) and one of four owners.
9/2006 – 7/2008	***BMW Group*** - Quality Management-Engineer in the „Corporate Quality "-Department. In charge of the Quality Processes for „Driver Assistant Systems, Navigation and Real-Time Information"
05/2006	***University of St. Gallen / BMW Group*** - MALIK-Academy for Strategic Leadership
3/2003	***BMW Drive Management Program*** - 18-month Program of the BMW Group for young professionals
9/2001 - 09/2006	***BMW Group*** - Research Engineer for „Traffic Modelling, Control and Navigation "

Awards:

- ***HEUREKA Award – 2002***
  Research Prize of the heureka-Foundation for Publication and Presentation at the HEUREKA 2002 Conference in Karlsruhe „Adaptive Zuflussregelung mit genetischen Fuzzy-Algorithmen"

- ***Mobil.tum 2013 - Best Paper Award***
  "A Macroscopic Optimization Model for the Relocation Problem of Free-Floating Car Sharing Systems

---

Memberships:

National

- Forschungsgesellschaft für Straßen- und Verkehrswesen (FGSV), Working Groups: Rampenzuflusssteuerung, Car sharing
- Heureka-Foundation (Co-Organizer of the FGSV-Heureka-Conference)
- Verband der Straßenbau-und Verkehrsingenieure (VSVI)
- Advisory Board of Deutsche Verkehrswissenschaftliche Gesellschaft (DVWG)
- Beratender Ingenieur of Ingenieurkammer Bau in Bavaria
- Member of the RISK research group at UniBwM

International

- Transportation Research Board: Standing Committee on Emerging and Innovative Public Transport and Technologies (Car Sharing)
- Automated and Connected Vehicles Task Force of the Transportation Research Board

---

Reviewer:

Scientific Journals

- Transportation Research Part A
- Transportation Research Part C
- Transportation Research Part D
- Travel Behaviour and Society
- International Journal of Sustainable Transportation
- Journal of Advanced Transportation
- Journal of Traffic and Transportation Engineering
- ASCE Journal
- IEEE – ITS Journal
- Transportation Policy
- Transportmetrica
- Straßenverkehrstechnik
- Various TRB committees

External Reviewer

- Swiss National Science Foundation (evaluation of research proposals)
- Austrian Research Council (FFG) (evaluation of research proposals and projects)
- The Luxembourgian National Research Agency (evaluation of research proposals)

Research Focus:

- ***Traffic Phenomena and Traffic Data***

  - Better understand Traffic Phenomena based on new Traffic Data
  - BIG DATA – Probe Vehicle Data Analysis

- ***Traffic Control and Traffic Information***

  - Dynamic Control Algorithms for Urban Congestion Charging
  - Models for High-Resolution Real-Time Traffic Information and Forecast
  - Interaction of Traffic Management and Autonomous Vehicles

- ***Sharing Systems***

  - Statistical Analysis of System Performance
  - Optimization of Operation of Bike/CarS Sharing Systems (Relocation)
  - Integration of Bike and Car Sharing Systems

- ***Autonomous Vehicle Systems***

  - Simulation-based Design of Robot-Taxi-Systems (traffic impacts)
  - Estimation of Network and Intersection Capacity of Automated Vehicle Systems
  - Routing Strategies for Automated Vehicle Systems

- ***Electro Mobility***

  - Forecasting Models for urban Charging Demand
  - Positioning Algorithms for Charging Stations

Research Highlights:

- Design of numerous national and international research projects

- Partner within large-scale research projects like E-Plan, DC-Laden Olympic Park, WiMobil, PREMIUM, City2Share and Easyride

- External Research Funding: over 4,5 Million Euros since 2012 at UniBwM

- About 50 reviewed Journal Articles (international and national) and over 100 Publications/Presentations at national and international Conferences

- Patents for the "Evaluation of Traffic Information Quality" and "Traffic State Estimation on Freeways"

- Eight completed PhD - Dissertations as first Supervisor since 2012

Munich, den 08. Februar 2021