Dr. Holger Hessdorfer

Personal information

E-Mail: holger@hessdorfer.com
Xing: Dr. Holger Hessdorfer

Work Experience

03/2022–now **Part-time Lecturer**, *Hochschule Karlsruhe*, Electrical Engineering and Information Technology.
Part-time Lecturer for Radiation Sensors and Detektors in the Master's Program of Sensor Systems Technology.

08/2021–now **Development Engineer and Project Manager for Metrology**, *Pfaudler GmbH*, Glass-Lined Instrumentation.
Responsibility for maintenance and future-oriented development of the portfolio in the area of analytical and physical measurement technology, with a focus on ph measurement. Evaluation of technology and market trends, e.g. in the context of digitalization and Industry 4.0. Initiation and implementation of development and innovation projects, e.g. for applications in the food sector. Identification and implementation of cost optimization for existing products. Support, training and technical consulting of the international subsidiaries in the product segment metrology. Technical evaluation of customer requests and their feasibility based on the existing product platform. Cooperation with universities and research institutes in innovation projects.

02/2017–02/2021 **Ph.D. Student**, *Karlsruhe Institute of Technology*, Institute for Photon Science and Synchrotron Radiation.
Thesis: A novel 2D in-line Bragg magnifier imaging system for dose-efficient X-ray imaging at synchrotrons
Focus: X-ray crystal optics, X-ray diffraction, X-ray microscopy, photon counting detectors, mechatronics, measurement and control technology, high precision positioning systems, instrumentation engineering

05/2014–01/2017 **Development Engineer**, *Karlsruhe Institute of Technology*, Institute for Photon Science and Synchrotron Radiation, ANKA Commercial Services.
Responsible for the development and optimization of measuring stations to increase the efficiency of measurement and testing services. Development and realization of concepts using state-of-the-art sensor technology, robotics and precision mechanics to increase the sample throughput from the design phase through procurement to commissioning.

01/2013–01/2014 **Development Engineer for Micro Technology and Sensors**, *Sensolute GmbH*.
Development of electronic components (layout/routing/setup) for signal evaluation and commissioning, Programming (C) of microcontrollers for the evaluation and control of sensor systems, Project management in the implementation of new development projects and sensor variants including documentation, data sheets and application notes, Technical customer support and support of international customers in the implementation of desired functions

Education

02/2017 - 02/2021 **Dr. rer. nat.**, *Albert-Ludwigs-University of Freiburg*, Freiburg Material Research Center.
Thesis: A novel 2D in-line Bragg magnifier imaging system for dose-efficient X-ray imaging at synchrotrons, Grade: magna cum laude, 1.9

10/2010–06/2012 **M.Eng. Sensor System Technology**, *University of Applied Sciences*.
Majors: Micro System Technology, Optical Sensors, Bio- and Chemo Sensors, Automation Technology, Solid State Physics, Grade 2.0

10/2004–08/2010 **Dipl.-Ing.(FH) Sensor System Technology**, *University of Applied Sciences*.
Majors: Hardware and Software Design, Control Technology, Sensor Signal Processing, Grade 2.2

9/1999–08/2003 **University Entrance Diploma (Abitur)**, *Technisches Gymnasium*, Balthasar Neumann Schule Bruchsal.