ARND GAZECKI
www.codefanatic.de

Experience

since 09/17 **BOSCH ENGINEERING GmbH**   **ABSTATT, GERMANY**
Working on adaptive cruise control driver assistance systems with radar and camera fusion. Functional area "Software Development"

- Responsible for radar software components related to digital signal processing, ego-vehicle dynamics estimation, object hypothesis and situational analysis with V-model compliance
- Analysis of vehicle measurements with focus on identification of target object loss reasons
- Evaluation of object type classifications with respect to obstacle and non-obstacle (NCAP)
- Preprocessing of vehicle dynamics signals and states using physical models and CAN data
- Supervised an intern who developed an automatic target object loss analysis tool in Matlab

10/16 – 08/17 **VALEO SCHALTER & SENSOREN GmbH**   **BIETIGHEIM, GERMANY**
Worked on a project for the development of a novel automotive laser scanner (LiDAR). Functional area "Software Development"

- Developed lane as well as border extraction algorithms with V-model compliance in C++
- Implemented a test environment to analyze the detection performance using OpenCV
- Experimented with the design and implementation of signal processing algorithms
- Enhanced the intrinsic end-of-line sensor calibration algorithms in C++

09/14 – 09/16 **ROBERT BOSCH GmbH**   **SCHWIEBERDINGEN, GERMANY**
Worked on a project for the development of a 48V electrical boost recuperation machine. Functional area "Software Development"

- Implemented software requirements for sensors and actuators in Matlab/Simulink under consideration of the V-model engineering specification and ISO-26262 compliance
- Experienced with offline algorithm development on Simulink simulation and HiL level
- Performed tests on the target by analyzing controls, runtime, code coverage, etc.
- Supervised an intern who designed a documentation tool for Matlab/Simulink models

Education

05/11 – 05/14 **UNIVERSITY OF ERLANGEN-NUREMBERG**   **ERLANGEN, GERMANY**
Degree: Master of Science. Course of study: Mechatronics.
Major: Electrical Drives and Power Electronics. Final grade: 1.6 / GPA: 3.4

- *Master's thesis at Fraunhofer IISB*: "Development of an automated test control system for a DC microgrid prototype" (grade: 1.3 / A-)
- *Research assistant at Fraunhofer IISB*: Designed a single-track vehicle model including a slip-based traction control system in Matlab/Simulink and analyzed road suitability
- *Focus*: DC-DC / AC-AC converters, DC / AC motor controls (FOC), linear drives, etc.

09/07 – 03/11 **BONN-RHEIN-SIEG UNIVERSITY OF APPLIED SCIENCES**   **BONN, GERMANY**
Degree: Bachelor of Engineering. Course of study: Mechanical Engineering.
Major: Mechatronics. Final grade: 1.6 / GPA: 3.4

- *Bachelor's thesis at Bosch Engineering GmbH*: "Enhancement of a powertrain simulation model in Matlab/Simulink used to calculate a vehicle's fuel consumption" (grade: 1.3 / A-)

04/12 – 10/12 **ROBERT BOSCH LLC**   **FARMINGTON HILLS, USA**
Intern for a business case study in the field of rapid prototyping for flexible engine control. Functional area "Software Development"

- Designed a gasoline engine control interface implemented in Matlab/Simulink to set and monitor engine speed/load through fuel injection and ignition based on driver's demand
- Tested the developed environment on target sensors and actuators at the customer site