

# Bojie Sun

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## AREAS OF STUDY

### Graduate

Embedded Systems  
Real-Time Computing  
Computer Architecture  
HW/SW Integration

### Undergraduate

Microcontroller Architecture  
Sensor and Actuator Technologies  
Automatic Control Systems  
System Modelling and Simulation  
Networks and Communication

## SKILLS

### Software

Programming:  
C • Python • Java • Javascript  
VB.NET • XML • MATLAB • R  
Operating Systems:  
Linux • Windows • Android

### Languages

English:  
Proficiency (TOEFL: 107/120)  
German:  
Proficiency (TestDaF: 17/20)  
Chinese:  
Mother tongue

## SCHOLARSHIPS

2011:  
Scholarship of German Academic  
Exchange Service (DAAD)  
2009 & 2010:  
The First Prize Scholarship in Tongji  
University

## RESEARCH

### TUM CREATE Ltd. | Research Assistant

09/2014 – 03/2015 | Singapore

- Designed, implemented and tested a distributed fault diagnosis software for modern automotive E/E architectures, including design of data structure and algorithm for deterministic performance and low footprint.
- Investigated contemporary fault-tolerance methodologies and their applications in various car networks.

### ABB Corporate Research Center (Germany) | Research Assistant

02/2012 – 08/2012 | Ladenburg, Germany

- Investigated Real-Time Java technology and its reliability for hard real-time software installed in embedded controllers.
- Designed a test control application using Real-Time Java and benchmarked relevant RT JVMs for runtime predictability, software performance, and cross-platform portability.

## EDUCATION

### Technical University of Munich (TUM) | Master of Science

10/2012 – 04/2015 | Munich, Germany

Majored in Electrical Engineering and Information Technology, GPA: 3.65/4.0  
Thesis: Design and Implementation of a Permanent Fault Diagnosis Method for Automotive E/E Architecture

### Tongji University | Bachelor of Engineering

09/2008 – 09/2012 | Shanghai, China

Majored in Mechatronics, GPA: 4.4/5.0

Thesis: Evaluation of Real-Time Java for Embedded Controller Applications

### Harz University | Bachelor of Engineering (Dual Degree)

09/2011 – 08/2012 | Wernigerode, Germany

Majored in Automation and Computer Sciences, GPA: 3.7 / 4.0

## INDUSTRY

### Gemalto Ltd. | Embedded Software Engineer

04/2015 – present | Singapore

- Worked on the mobile payment software team to develop and validate the MasterCard Mobile Paypass (MPP) application on Javacard platform.
- Deeply studied smart card technology and its secure software architecture, including the relevant specifications like Global Platform, Javacard, EMV, MasterCard M/Chip.

### Robert Bosch GmbH | Internship

03/2014 – 08/2014 | Reutlingen, Germany

- Designed and tested an evaluation PCB for testing of a few automotive MEMS sensor ASICs in pre-development phase.
- Simulated a FPGA-based control model in MATLAB/Simulink.