Mareike Davis

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SUMMARY

Engineer (BSE, BA, MSc) with professional experience in applications, product development and launch, process improvement, project management, and CAD in semiconductor and aviation industries.

EDUCATION

- **M.Sc., Project Management (specialization in Industrial Engineering)**   **Aug 2016 – Jun 2018**

Norwegian University of Science and Technology, Trondheim, Norway (Thesis grade: A / highest possible)
Thesis title: *Investigating Knowledge Transfer During the Departure of a Project Member in the Semiconductor Industry*

- **B.S.E, Computer Systems Engineering; B.A., German;** Barrett, The Honors College   **Aug 2009 – Dec 2013**

Arizona State University, Tempe, Arizona (GPA: 3.79/4.00)

PROFESSIONAL EXPERIENCE

Aviation Communication & Surveillance Systems (L3 Technologies), Phoenix, Arizona: Systems Engineer   Jan 2019 – Present

- Set up SharePoint architecture to accommodate record keeping, file auditing, and metrics tracking
- Assisted with component installations on the company-owned experimental aircraft
- Modified wiring diagrams using AutoCAD and created templates for new diagrams
- Proofread technical documentation to be submitted to FAA-regulated organizations

Freescale/NXP Semiconductor, Tempe, Arizona: Application Engineer   Feb 2014 – Aug 2016

- Provided customer support for motor drivers, switches, and powertrain ICs
- Designed and tested 12 evaluation boards for various ICs with Cadence schematic design and Allegro PCB layout tools
- Wrote user guides and testing procedures for evaluation boards
- Negotiated with component and PCB suppliers to lower costs and ensure on-time delivery
- Worked extensively across business units to develop new procedures and standards both for technical documentation and technical specifications of evaluation boards to improve industry compatibility
- Drove NPI efforts on a three-phase motor driver (MC33GD3000), including testing new specifications in a lab environment and creating marketing collateral; received "On-The-Spot" award for exceeding business unit goals related to this project
- Coordinated with a multi-site, multi-country team to retrofit a drone with Freescale motor drivers and microcontrollers for a trade show; received "Top Achiever 2015" for leading this project
- Created and taught a 3-hour three-phase motor hands-on class at FTF 2016 for 20 participants
- Represented Freescale/NXP Drivers group at Embedded World 2015 (Germany) and FTF 2016 (USA)

Freescale Semiconductor, Tempe, Arizona: Embedded Systems Intern   May 2013 – Dec 2013

- Controlled motorcycle components (spark plug, fuel injector, etc.) via SPI protocol written in C using CodeWarrior

Voith IT Solutions, Heidenheim an der Brenz, Germany: SAP Intern   May 2012 – Jul 2012

- Implemented an SAP data loading system using ABAP that improved efficiency by more than 95%

SKILLS

Design: Cadence Capture CIS, Allegro PCB Editor, AutoCAD, KiCad
Programming: C, mbed, C++, MIPS Assembly, Java, ABAP
Tools: MS Word, MS PowerPoint, MS Excel (including finance), MS Project, SharePoint, FrameMaker, SAP, JMP
Equipment: Oscilloscopes, logic analyzers, multimeters, thermal test chambers
Certifications: Six Sigma Yellow Belt with intent to continue, interest in PMP certification, pilot ground school (in progress)
Additional languages: German (fluent, USA/Germany dual national)

ACTIVITIES

Norwegian University of Science and Technology, Trondheim, Norway: Financial Officer   Oct 2016 – Oct 2017

- Secured funding and handled the budget for the 60-member Project Management Student Organization