

Resume – Markus Löffler



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Internet	E-Mail: markus@loffler.de, Web: http://www.loffler.de
Place/Date of Birth	München, 06/01/1971
Nationality	German
Marital Status	Single

OVERVIEW

- **International experience** through 6 years of study in the USA (diploma thesis/Ph.D).
- Hands-on experience in product development, product management, testing, marketing, and customer support as an essential part of a **startup company**.
- **Project management** and team experience (led a team of 3 master students for a software project).
- 10 years of experience in software design in C, 7 years of experience in **object-oriented design** in C++, knowledge of the integration of advanced programming techniques (real-time, embedded, virtual reality, client/server, GUI).

EDUCATION

Ph.D., Electrical Engineering at Clemson University, Clemson, SC, USA. GPA 3.9, Thesis title: “*New Object-Oriented and PC-Based Approaches to Robot Control Software*”. 01/1997 to 08/2001

Diploma, Electrical Engineering at Technische Universität München, München, Germany. Average Grade 1.6, Thesis title: “*Measurement of the Yarn Path and Tension in Yarn Unwinding*” (External Thesis at Clemson University, USA). 10/1990 to 10/1996

EMPLOYMENT HISTORY

Quality Real-Time Systems (QRTS) LLC, Startup Company, VA, USA, <http://qrts.com> 01/1998 to 12/2001
Consultant/Contractor, Technical lead for all QNX products.

- Development of *QMotor 3.0*, a PC based real-time graphical control environment, and the *QMotor Robotic Toolkit* in C++, on the QNX 4 and QNX6 (QNX Real-Time Platform) operating systems.
- Development of *QWidgets++*, a C++ class library for the graphical user interface Photon on QNX 4 and QNX 6.
- Maintenance and organization of all QRTS QNX software packages.
- Marketing, customer support, and teamwork with other companies.

Clemson University, SC, USA. 01/1997 to 08/2001
Graduate Research Assistant.

- Development of the Robotic Platform, an object-oriented robot control platform that integrates real-time control, a graphical user interface, and 3D simulation on a single PC, using the QNX 6 operating system.
- Development of a telerobotic semiautonomous disassembly system, including development of a video based operator interface for QNX4/Photon, a virtual reality based operator interface for Windows NT, and teleobservation tools.
- Administration of the QNX and Windows PCs and the local network

Liveshow, Munich, Germany.

- Technical organization, poster design and web page design of 23 slide show presentations in seven German cities about trips to Mid-East, Africa and Asia.
- Development of the EasySlide system for multimedia control in slide shows.

03/1991
to 04/1997

Siemens AG, Munich

Internship. Development of an error protocol analysis tool for the telephone system EWSD under OS/2 GUI.

03/1995
to 04/1995

Siemens AG, Munich

Internship. Software/hardware design of a tool to monitor data highways in the telephone System EWSD.

03/1993
to 04/1993

Siemens AG, Munich

Internship. Hardware design for a DSP board in the telephone system EWSD.

04/1992

OTHER ACTIVITIES

Journey to nine countries of Central and South America, to improve my Spanish language skills, and to learn about new cultures.

09/2001
to 12/2001

SELECTED PUBLICATIONS

M. Loffler, V. Chitrakaran, and D. Dawson, “*Design and Implementation of the Robotic Platform*”, Journal of Intelligent and Robotic Systems, Special Issue on Multiple Cooperating Robots, to appear.

M. Loffler, D. Dawson, and N. Costescu, “*QMotor 3.0 and QMotor Robotic Toolkit: A PC Based Control Platform*”, IEEE Control Systems Magazine, to appear.

M. Loffler, N. Costescu, E. Zergeroglu, and D. Dawson, “*Telerobotic Decontamination and Decommissioning with QRobot, a PC-Based Robot Control System*”, International Journal of Computers and Applications, to appear.

AREAS OF EXPERTISE

- Object Oriented Software Design, C++.
- Development of Real-Time/Embedded Systems on QNX 4 and QNX 6 (QNX Real-Time Platform).
- Development of Graphical User Interfaces in Windows (MFC) and QNX Photon.
- Client/Server/Network Programming.
- OpenGL/Open Inventor 3D Graphics Programming.
- Hardware/Software System Integration.
- Languages: German (native), English (excellent), Spanish (basic).

PERSONAL REFERENCES

Dr. Darren M. Dawson

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Dr. Nick Costescu

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