

# Resume of Michael Kropfberger

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## Personal Data

Name	Michael Kropfberger
Academic Degree	Dipl.-Ing. Dr.-techn.
Nationality	Austrian
Birthday	05/31/75 in Linz (Upper Austria)
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## Education

2001-now	Project Assistant at University of Klagenfurt, finished by PhD in the area of MPEG-4 adaptive routers and video streaming, buffer management and dynamic bandwidth adaptation and stream switching, advised by Prof. Dr. Hermann Hellwager and Prof. Dr. Lszl Bszrmnyi
1995-2001	University of Klagenfurt (Computer Science major) Master of Science
1998	(6 months) Exchange student: University of Northern Iowa, USA (Computer Science and Business, Dean's List)
1989-1994	State Academy of Business (Klagenfurt, Austria)

## Relevant Jobs and Projects

- 2004-est.May 2005
  - Prototype development and setup of a *Networked Mobile Multimedia Guide* for Minimundus GmbH. Different miniature objects like the Eiffel tower or the Spaceshuttle are presented via WLAN-connected Handhelds and TabletPCs using Video, Audio and Text.
  - Teaching the aspects of different server/client web technologies at Uni-Klu.
- 2002-now
  - One of the core team members of ViTooKi, a client/server video toolkit with focus on adaptive streaming via RTSP+RTP/UDP, caching and adaptation of MPEG-4 video and MP3/AAC audio. It can be found on <http://vitooki.sourceforge.net>
  - Active within the MPEG Consortium for MPEG-4/7/21, especially on MPEG-4 scalable video. Attended various MPEG meetings all over the world
  - Project management and supervising of various students, Master thesis students and interns within ViTooKi and other related projects; close co-working with other Ph.D. candidates within the same multimedia software toolkit.
- 2001-now
  - Project Assistant at the University of Klagenfurt, this included my PhD but also teaching of over twenty different Networking and Operating Systems Courses
- 2003
  - Tought various Unix System Admin Courses for local companies
- 2002
  - Tought two Unix System Admin Courses for three days each at Carinthias leading Financial Solutions Company UNiQUARE
  - Worked for carinthian [www.liscon.com](http://www.liscon.com) on integration of a session management system into Liscon Thin Client flash images

- 2001
  - Master Thesis *Open-Source Multimedia Session-Management For ThinClients Based On The X Windowing System*. Basically a MS Terminal Server, VNC or SunRay session management clone, but sending X commands instead of raw pixels and hereby increase local hardware performance for draw directives  
<http://www.kropfberger.com/xray.html>
  - Helped with porting Linux on an embedded system based on the Cirrus Logic ARM EP7211 processor, containing a boot loader, flash RAM support, all as a platform for a telemetry sensor communication software in C, where I also helped on planning and implementing for [www.liscon.com](http://www.liscon.com)
- 2000
  - (6 months) Internship for Sun Microsystem Laboratories, Palo Alto, California, USA: Kernel Lottery Scheduler for the Solaris Operating System on Multiprocessor Sparc Platforms (a loadable kernel module)
- 1999
  - Worked over a year for Semmelrock Betriebsinformatik, with tasks like: Planning and setting up internet/intranet sites with firewalls, mailserver, DNS, proxy, WWW, FTP, etc. for 16 Austrian vocational schools, connecting them all together
  - Programmed Linux KDE applications for MieTerra LLC
  - In my university practical course, I helped to change the Operating Systems class for future use from Minix to Linux. This included the creation and implementation of 10 lessons starting from C systemcalls up to kernel hacking.
- 1998
  - Programmed KDE applications for Linux, Solaris, BSD, HP-UX (eg. KDiskFree: a graphical frontend for the df-command) Developed an object oriented C++/Qt wrapper for pvm3, a well-known parallel distributed programming library
- 1997
  - wrote an action computer game "CaRace" like MicroMachines

- 1996
  - Started using UNIX, especially Linux
- 1995
  - Wrote a tourist management software for local hotels (booking rooms, printing bills, reservations, food & beverages, etc.) in Turbo Pascal.

## Other Experiences

- Programming Languages: C/C++, Bash, Java, perl, AWK, Pascal, Lisp, Prolog, ...
- Computer Skills: Unix software development, system-near development, Linux, L<sup>A</sup>T<sub>E</sub>X, LAN/WAN, Routers, parallel and distributed computing, System Administration
- check out <http://www.edu.uni-klu.ac.at/~mkropfbe/papers.html> for my work
- Other Skills: team worker, communicative, open to interesting challenges, very enthusiastic
- Language school in England (July, 1987)
- Language school in England (August, 1988)
- Austrian military service (1994)
- fluent with English and German (lifelong training :)
- 5 years of Italian at school
- General basics of Russian

## Private Interests

singing, music, computers, skiing, swimming, motorcycle tours

## Letters of Recommendation

Letter of recommendation for Michael Kropfberger

To Whom it may concern:

Michael Kropfberger was a summer intern in my group from May 1, 2000 until September 1, 2000. During this time he worked on a lottery scheduler for the Solaris operating system. The goal of the project was to replace the current priority-based scheduler with a proportional-share scheduler. The work included the design of a new scheduler, its implementation, and integration into the Solaris kernel. The latter task was significantly complicated by the lack of documentation and standard debugging tools. Michael handled this challenging task very well and was able to demonstrate a working system integrated into the Solaris operating system.

We experienced Michael as a hardworking and competent colleague. He pursues his work with enthusiasm and easily masters the hurdles he encounters. He communicates well and easily finds his way to coworkers if information or help is needed. He is self-motivated and able to work independently.

Michael has a pleasant personality which makes it easy to work with him. If you would like to speak to me about Michael's skills, talents and work habits, feel free to call +01 (650) 336 6520.

Sincerely,

Hans Eberle

Sun Microsystems Research Laboratories  
Senior Staff Engineer  
hans.eberle@eng.sun.com

March 20, 1999

To Whom it May Concern:

Michael Kropfberger was a student of mine in two courses at the University of Northern Iowa during the Fall 1999 Semester. The courses were Computer Architecture, and Information Storage and Retrieval. Michael was an exchange student from Austria.

Michael is very interested in both hardware and operating systems, especially Linux. He is conversant with current trends in computing both in the US and Europe and he has had considerable experience with network based computing. He was an excellent student and I would recommend him without reservation.

Kevin C. O'Kane, Ph.D.  
Professor of Computer Science  
University of Northern Iowa  
<http://www.cs.uni.edu/~okane>  
okane@cs.uni.edu

(319) 273 7322  
(319) 266 4131 <Iowa>  
(508) 778 9485 <Massachusetts>

Dear Michael Kropfberger,

It is a pleasure for me to give you the recommendation below.

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To Whom it May Concern

Michael Kropfberger has been a student of mine for several years at the University Klagenfurt, in different courses, such as programming, operating systems, compiler construction and distributed systems. Currently he is participating in an internal project with the aim to provide a number of exercises for an operating systems course based on Linux. His contribution is very essential to this project.

Michael Kropfberger is an outstanding student, he has very good questions and a plenty of fresh ideas. He has also considerable knowledge about computer systems and their application. He is a diligent implementor and a good programmer.

I recommend him most warmly and without reservation  
Laszlo Boeszoermyeni  
Klagenfurt, Austria, March 23, 1999

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Prof. Dr. Laszlo Boeszoermyeni  
Institut fuer Informationstechnologie

Universitaet Klagenfurt | e-mail: laszlo@itec.uni-klu.ac.at  
Universitaetsstr. 65-67 | Tel:(43)-(463)-2700-509 (506 secr.)  
A-9022 Klagenfurt | Fax:(43)-(463)-2700-6216  
Austria | http://colossus.itec.uni-klu.ac.at/~laszlo/

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Dear Michael,

I hope this recommendation will be of service to you.

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To Whom it May Concern

As a small company of IT consultants we are constantly looking for specialists in different fields to help in our projects.

Michael Kropfberger enforced our team in several regional projects whenever intranetworking and security was an issue, most notably in a recent project involving more than a dozen vocational schools.

We and our customers highly estimate his in-depth knowledge of network services and their integration at the customer site as well as his ability to design and implement flexible, robust and customer-oriented solutions. We have come to know him as an excellent team member who delivers high quality work in time and within budget.

I recommend him without reservation.

Harald Semmelrock

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Semmelrock Betriebsinformatik  
DI Harald Semmelrock

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