

CURRICULUM VITAE

Kenneth Blake



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Järfälla
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Email: ken@oberon.se
Date of birth: 26th July 1957
Citizenship: British and Swedish

PROFILE:

- Seasoned consultant experienced in advanced software engineering with in-depth knowledge of embedded systems, DSP, real-time systems
- Dynamic and result oriented in guiding companies to greater efficiency and profitability
- Able to communicate clearly and concisely with people of diverse background and level of authority
- Extensive experience in the preparation and trials regarding flaws in public tenders and civil trials

MANAGEMENT:

- Managed a small software consultancy company for nearly fifteen years, including all aspects of administration, law, and accountability for profit and loss, controlling costs, and achieving revenue objectives.
- Met deadlines for targets by effectively utilizing employees and other entrepreneurs in a network
- Co-founder of a plastic surgery clinic, responsible for financing of start capital and working capital, business development, marketing and public relations. Localizing premises satisfying the safety demands for surgery as well as convenience and availability for patients. In addition, including all aspects of administration, accountability for profit and loss, controlling costs, and achieving revenue objectives.
- Negotiating with public health services and the Swedish road authority and a lot of clients.

MAJOR ACHIEVEMENTS:

- Initiated a project and developed the software and hardware and built two different road profilometers that were qualified in two public tenders and were used for several years. They had a unique software solution.
- Successfully completed two public tenders.
- Created a fast transform for transforming an image that was captured with a video camera at a 45 degree angle into a normal displayed image for optical splicers.
- Reduced customer and maintenance costs by creating a solution for TDMA power slot regulation that made it possible to reduce and regulate output power for Ericsson's base stations. It was thought impossible but I did not know that. The task was thrown at me as a consultant to prove that it could not be done but they were positively proved wrong.
- Testing and solving many problems when measuring road irregularities with road survey vehicles and creating new software. The vehicles measure one third of every asphalt road in Sweden every year. Developed special very fast linear phase IIR filters.
- Appointed by the (EC) European Commission as an expert for embedded systems and work as an Expert research project evaluator in the area "embedded systems" for the European Commission's sixth and seventh framework programme

EDUCATION:

- **M Sc**, Master of Science in Computer Science and Engineering (Datateknik-82), Linköping Tekniska Högskola (LiTH). (Linköping Institute of Technology)
- **eMBA**, Executive Master of Business Administration (2003), Stockholm University, School of business
- **Master** of Management and Organization, awarded 29 march 2004, Stockholm University

CAREER HISTORY:

EDUCATION:

- **2001 - current** Co-founder of Kibele AB (<http://www.strandkliniken.se/>)
- **1989 –current** Owner of Oberon Data och Elektronik AB. (<http://www.oberon.se/>)
- **1982 – 1989** Employed at Philips Elektronik Industrier AB, Järfälla. (1982 to 1989)

EXPERIENCE:

More than 20 years experience in software engineering

- *Project Management.*
 - Two completed products for road surveys qualified in public tenders
 - Startup of a plastic surgery company
- *Key areas (telecomm, measurement, test)*
 - DSP, Digital signal processing TI TMS320C2x, 320C3x, 320C4x, 320C5x, 320C55x, 320C62xx
 - Embedded systems, RTOS: OSE and Uc/OS.
Appointed by the European Commission (EC) as an expert for embedded systems and work as an research project evaluator in the area “embedded systems” for the European Commission’s sixth framework programme
 - Real-time systems
- *Software design*
 - Object oriented models
- *Software languages*
 - Assembler(long experience)
 - C(long experience)
 - C++(experience)
 - Java(experience)
 - JavaScript, HTML, and other webb oriented things
 - Perl, writing verifications tools for internet and SNMP based network management.
- *Hardware designs*
 - Measurement system for road surveys
 - Self made systems
- *Business related issues*
 - Founder of Oberon data och Elektronik AB
 - Co-Founder of Kibele AB (www.strandkliniken.se)
 - Fluent in marketing, public relations, financing, economics, bookkeeping
 - Interpersonal relations: Studied cognitive behavioral science
 - Innovations: two road survey profilometers
 - Completed two public tenders

PROFESSIONAL MEMBERSHIPS:

- Senior Member (2008), 1978 to present Member of the Institute of Electrical & Electronic Engineers (**IEEE**).
- European Engineer by FEANI, (EUR ING) 1995

ACTIVITIES:

- Member of the board of a bostadsrättsförening since 1990. (co-operative building society)

ADDITIONAL INFORMATION

- Driving license

HOBBIES / INTERESTS

Jogging, reading, travel, music, dancing, cinema, and theatre. Software and creative leadership, the processes of human knowing: perception, communication, coding and translation. This came out of the quest and search for the process of creativity in combination with software development.

DETAILED CV

PROFILE:

A senior software and hardware "Bilingual" engineer with a wide range of experience in the software industry including business related issues as business development, marketing, management, financing, economics, law, and starting up companies. Very able to work on own initiative and as part of a team. Self initiating, easily motivated, with an excellent ability to focus on targets. Proven leadership skills involving managing, developing, inspiring, and motivating teams to achieve their objectives. First-class curious, creative, analytical, design and problem solving skills. Dedicated to maintaining high quality standards. Good interpersonal and communication skills that allowed me to build good relationships with team colleagues and clients alike. Works well under pressure and achieves clients' deadlines.

EDUCATION:

M Sc, Master of Science in Computer Science and Engineering (Datateknik-82), Linköpings Tekniska Högskola (LiTH). (Linköpings Institute of Technology)

Master's degree, Management/Organization, Stockholm University (2004)

eMBA, Executive Master of Business Administration(2003), Stockholm University, School of business,

Modules: Enhancing Leadership. Business Intelligence. Business project analysis and risk management. eMBA-Thesis

The eMBA course is a mean for me to broaden my skills into the world of behavioral science, which business administration really is. And to complement strengths in reporting, negotiations, acquisitions, benchmarking studies, S.W.O.T and P.E.S.T, Scenario analysis, investor relations, strategic planning, internal control and reorganizations.

Continuing Education:

Neuro Linguistic Programming (NLP) and Neuro Hypnotic Repatterning (NHR), cognitive psychology) :

- NHR (Neuro Hypnotic Repatterning) (6 days), John LaValle, Richard Bandler (2001)
- Master Practitioner, Paul McKenna, Richard Bandler, MichaelBreen (2004) (9 days)
- Trainer's training John LaValle, Paul Mckenna, Richard Bandler (2004) (9 days)
- Practitioner, Paul Mckenna, John LaValle (2005) (7 days)
- NHR (Neuro Hypnotic Repatterning) (5 days), John LaValle, Richard Bandler (2007)
- Hypnotic practitioner, John LaValle, Richard Bandler, Paul McKenna
- Hypnosis Practitioner(5 days), John LaValle, Richard Bandler (2009) (NLP)

- Project Management (60h) Folkuniversitetet
- Digital signal processing (5weeks) Uppsala University
- Global Positioning System(GPS) (4 days), George Washington University
- Theoretical psychology (21h) Folkuniversitetet
- Psychosynthesis, Folkuniversitetet

Management:

Owner of Oberon Data och Elektronik AB. (1989 to now)

Working as a software consultant besides making own products. Working on different levels with DSP designs, measurement systems, Realtime kernels. Product design & development. Responsible for design and implementation of DSP-based measurement systems. Responsible for implementation of hardware & software, technical specifications & design documentation. Presenting training seminars. Responsible for liaisons with external industry partner. Responsible for acquiring public tenders. <http://www.oberon.se/>

Co-founder of Kibe AB (2001 to now)

Creating business opportunities, Business development, Business Ideas, business plans, Business Intelligence, PEST&SWOT analysis, scenario techniques, strategic business planning, Management, financing, financial modeling, Working capital analysis, marketing strategies and tactics, public relations, and webmaster, for a start-up venture in Plastic Surgery (<http://www.strandkliniken.se/>). When the telecomm industry toppled I divided my efforts into continuing my education and became active in this business area that has more activities. This company has now reached a turnaround of more than \$2.000.000 (2009) from zero, in 8 years

A selection of some of Oberon's clients (I have a more detailed work description for each client if you want to know more)

- PowerWave technologies (5 months)
Writing an automated verification tool for a system verification of 3G antenna tower mounted amplifiers and antenna remote tilt controllers via a SNMP based network. The Verification tools were 8000 lines of PERL script. One verification pass took 15 hours.
- Nokia Mobile Phones Denmark A/S (8 months)
Migration and integration of speech-, audio- and video – codecs into new mobile telephones. Rewriting code to faster and more effective code with less CPU load and memory footprint. As always when utilizing cost effective solutions memory size is an important key factor and proper memory configuration is a very time consuming job. The software platform were OSE RTOS based and the hardware were using Texas Instrument DSP cores. Integration tests were performed using Nokia's test equipment for tracing OSE signals.
- Mitel Semiconductor AB (5 months) (now Zarlink)
Embedded systems software. Investigating and testing many eight and sixteen bit processor software development systems to look into the quality of them in relation to a specific development system of interest for Mitel. In addition looking into the matter of how system on a chip solution can be debugged. Making a recommendation for a go/no go decision for continuing with a specific intellectual property ASIC processor solution that in reality also ended my contract with them. Implemented an Uc/os RTOS port for their chip.
- Cisco Photonics Sweden AB (6 months)
Software for DWDM-systems (Dense Wavelength Division Multiplexing) DWDM adds several high bandwidth channels into one optical fiber. (C++)
- Qeyton Systems AB (bought by Cisco Systems)
Production quality software. Software for production test of DWDM (Dense Wavelength Division Multiplexing) fiber optical systems for Internet. In a production environment many specific components need to be tested, verified and traced throughout the production and also the verification of the combination of the components into bigger system components. (C++)
- Ericsson Radio Systems AB (2 years)
Radio Base station development (TDMA group: Digital Radio software design) Embedded software development for Texas Instrument's DSPs. (TMS320C6x, PowerPC, TMS320C5xx)
Software for Base stations. Development of very high data rate communication controllers. for tests (Assembler and C). The Base stations software platform were OSE based. I ported Uc/os RTOS to the TMS320C6x based test controller.
- Ericsson Cables AB, (2 years)
Embedded Software development for a multiprocessor optical fiber ribbon splicer with a DSP (TMS320C44, NEC V55, PIC processors) with a distributed Real-time Kernel. It was an optical measurement system with two cameras controlling the welding of the optical fiber ribbon with later estimate of the attenuation of the welded fibers. (assembler and C)
- Institute for Optical Research, IOF AB now Acreo AB,
Embedded software development of a DSP (TMS320C44) based measurement system for fiber optic smart structures (optical fiber as strain gauges) including implementing a real-time kernel. Measure cracking in in fiber composite materials wings of fighter planes by counting the acoustic waves that occurs when cracks occur. Similar to measuring acoustic waves when there are earthquakes. (Assembler and C)
- OPQ Systems AB, (6 years)
A measurement system running twenty DSPs in parallel (TMS320C25) used for road surveys. I implemented the DSP software for the measurement applications: Evenness(IRI, PSD), longitudinal profile, crack, texture, rutdepth, waterdepth, faulting, crossfall. The aim is to be able to obtain knowledge of road grip, ride comfort and road wear. (assembler and C) This work took many years.

Employed at Philips Elektronik Industrier AB, Järfälla. (1982 to 1989)

A company designing telecommunications equipment for distributed transaction systems using their own brands of computers and their own 16 bit real-time multi-user, multitasking operating system written in assembler.

Positions Held: Development Engineer (software) Product design & development.
Responsible for design and implementation of drivers, utilities (similar to Norton utilities), internal operating systems functions (boot loader, system loader, file system, data management, C-linker, C-compiler).

Responsibilities included:

- Design & development of test applications written for the operating system. Responsible for the utility packet, and a fileserver system with different applications, technical specifications & design documentation.
- Design & development and implementation of a FORTH runtime system used as a test bed software tool.

Management & Project Management

What I think is most interesting to know in this area is that I have, twice, been through the process for public procurements, from the start to the end, issued by the Swedish Road Authority (Vägverket) in 1995 and 2000 for road survey measurements. As you can imagine this took a lot of work, especially for a small company. The procurements were applied according to the EU law for public tenders, with all the necessary documents (quite a few of them). We got through the loophole and were qualified according to technical and quality requirements. Both procurements involved an intensive two-week test with over 170 road measurements comparing our results to hand measured values.

DSP designs

Completed designs with fixed point and floating point DSPs from Texas Instruments (TMS320C2x, TMS320C3x, TMS320C4x, TMS320C5x, TMS320C62x) designs with complete DSP hardware and software to implement high-speed measurement systems satisfying international standards and specifications thorough experience with DSP processor architectures and software development systems in order to achieve maximum DSP performance involving advanced digital signal processing techniques

DSP System designs

Designed and implemented a complete measurement system design using fixed point and floating point DSPs from Texas Instruments and using Windows as a graphical user interface (GUI). (Road measurement system approved by Vägverket)

Microprocessor design

Design experience with several general-purpose 32-, 16-, and 8-bit embedded processors (PowerPC, Intel 80x86 Microchip PICs) and associated software development systems

Software design

Extensive C code development experience in DOS, Windows, DSP and embedded processor environments assembler code development for various digital signal processors(DSP) and/or embedded processors. C++, JAVA, JavaScript, HTML (Simula, Oberon, Pascal, Basic, Forth) Experience of of-the-shelf kernels and own implementations of Real-time kernels for DSPs, Accelerated Technologies Kernels Nucleus and Nucleus+, Good working knowledge of RTOS and Uc/OS where I made a port for TMS320C6201 for it. ([MicroC/OS](#), the real-Time Kernel).
· Experience of National Instruments CVI/Labwindows, Labview.

Embedded system

Embedded system design is a fascinating adventure as to when developing windows software. I got caught in this creative art when moving from analog designs to software years ago. It is a good feeling working with these types of systems and I have specialized in embedded systems with many many targets in Texas Instruments DSPs. I want you to know that I have worked with systems with Digital Signal Processing and statistical software, Digital communication software and also some very hardware close applications and others at user level. Its curious, but we are still counting clock ticks just as we did 6 years ago but now its in nanosecs instead of microsecs.

Hardware design

I am fluent in schematics, both digital and analog. I constructed and built many, many, analog and digital hardware designs some years ago. I made my own constructions, some of the constructions were analog amplifiers that I made by producing my own PCBs in the garage frightening my mother with all those acid chemicals, drilling them, soldering components onto them, testing them, and I do still use them. I revived my knowledge again when I made the road measurement system (that you may read about further on) making analog filters before the A/D converter. Soldering the analog parts, wire wrapping the digital parts, connecting to of-the-shelf bought modules with DSPs, DC/DC converters etc...

Technical Documentation

Thorough experience in writing technical design documents and specification / requirements documents. This is normally executed with ANSI/IEEE documentation standards

Experience in business-economics

You may wonder how I got these experiences but running small companies really gets you into details with many facets of marketing, public relations, financing, economics as for example seeking and contacting customers, result- and balance sheets, bookkeeping, annual reports, tax reports, budgets, cash flow, etc..

Innovations

Designed and built a complete vehicle (car) based measurement system that measure road irregularities. One of two systems that were approved by the Swedish National Road Administration (Vägverket). Been in operation since 1996 and is used for measurement of roads in Sweden. The used DSPs were TMS320C31, 320C44, TMS320C50

Interpersonal relationships

I have studied the science of neuro lingual programming, the cognitive behavioral science that focuses on how humans communicate with each other via human language. How we talk in language patterns, how we structure our language and transfer information between each other. And the more I read about it the more interested I get about it.

Interests / Hobbies:

I usually jog every day to get a endorphin kick. I read a lot of books and during the last years it has been much business-oriented literature as I have attended the executive MBA course. But I have also read a lot of neuro lingual science (NLP) in the same time. I am a big consumer of books. I spend time with my two boys when they can separate themselves from playing computer games. I like to develop web sites especially by thinking of how the structure impacts the reader. I enjoy travel. Listening to music and also dancing.

Miscellaneous

Born in Karlstad, Sweden, 26 Juli 1957
Two sons (they are young men now) born 1985, 1986
Divorced
Driving license