

## **Miska Hiltunen (M.Sc.)**

Master of Science in Information Technology

Saladin-Schmitt-Strasse 43, 44789 Bochum Germany

Tel. +49-234-33 82 35 9, mobile +49-174-94 88 811, Miska.Hiltunen@qualiteers.com

## **RESUMÉ**

### **Profile**

#### **A software quality professional:**

- a versatile communicator, a motivating presenter and a supportive mentor
- with understanding of all aspects of software development
- an expert in formal inspections, metrics and software reliability

#### **A solid background:**

- university degree (M.Sc.) in Information Technology (major: Software Systems)
- 15+ years of professional experience in the software industry  
(embedded software development, team leading and quality management)

#### **Positive mindset:**

- creative and innovative; committed to constant improvement
- result-oriented, yet empathic
- clear, pragmatic and convincing
- with a good sense of humor

### **Professional Experience**

#### **SECUSMART GmbH, Düsseldorf, Germany**

**02/10-**

##### **Specialist, R&D Software**

Responsible for new product development using Java. The mobile phone software application uses a special micro-SD card to encrypt and decrypt audio data making wiretapping of the telephone conversation practically impossible. (www.secusmart.com)

#### **Major achievements:**

- Developed a multithreaded mobile phone application capable of WLAN communication with another mobile phone running the same software.
- Developed a micro-SD card update and wipe software with Nokia Qt/C++/Windows XP. Application reads contact data from an old card, wipes the card securely clean and moves the contact data to the new card.

#### **QUALITEERS, Bochum, Germany**

**02/06-**

##### **Owner, Freelance Trainer**

Became self-employed with a specialized focus on code inspection. Created **Tick-the-Code** Inspection training course with rule cards, a summary and a certificate. Do mostly in-house training courses on demand. Part-time activity since 02/10.

**Major achievements:**

- Trained over 800 software professionals from over 50 companies. Training sessions took place in-house in Finland, USA, France, Germany, Russia, Sweden and Belgium.
- Presented my research paper called “Tick-the-Code Inspection: Empirical Evidence (on Effectiveness)” at Pacific Northwest Software Quality Conference ([www.pnsqc.org](http://www.pnsqc.org)) Oct-2007 in Portland, Oregon, USA
- Published my first research paper called “Tick-the-Code Inspection: Theory and Practice” in the peer-reviewed publication called Software Quality Professional (Jun-07). American Society for Quality ([www.asq.org](http://www.asq.org)) publishes the journal quarterly.
- Better Software magazine (Dec-06) published an article of mine called “**Happy Are the Software Engineers...**”.

**NOKIA GmbH, Bochum, Germany****12/99 – 12/05****Software Quality Specialist (R&D)**

10/03 – 12/05

Responsible for software quality assurance in a software integration department of about 80 software professionals, who integrated software packages from different parts of Nokia and from external companies, and produced fully functional software packages for Nokia mobile phones. Concentrated on improving the employees' quality awareness, motivation and skills, both locally and internationally.

**Major achievements:**

- Created and maintained a *Software Quality Manual* for the intranet. It soon became an essential resource for the software department (thousands of hits monthly).
- Created and published 70 software quality related *posters* with intranet background material to raise local staff software quality awareness.
- Created and published 34 issues of a monthly *newsletter* (“The Inspector”) for more than 200 subscribers to raise supplier staff software quality awareness.
- Started an *error prevention* initiative with regular root cause analysis meetings.
- Developed a simulation model to measure the *software reliability* of mobile phones. Supervised a team of four students.

**Senior Design Engineer (Software Quality)**

03/02 – 09/03

Part of the “Quality, Methods and Tools” team, who supported the software department (staff of 80) in using industry best practices, tools and processes.

The software department implemented software, integrated software from different parts of Nokia and from external companies, and produced fully functional software packages for Nokia mobile phones.

**Major tasks:**

- Finding methods and tools to improve the quality of the incoming software.
- Quality planning for projects.
- Creating and maintaining process descriptions in the company intranet.
- Defining meaningful measurements for evaluating software (the metrics). Collecting, analysing and reporting of these data (the metrics).
- Holding regular training sessions on various improvement themes. This was to improve staff motivation and expand their set of skills.

**Major achievement:**

- Introduced a software inspection process for improving the quality of written design and requirement documentation. Trained more than 100 people as effective checkers and about 20 as software inspection team leaders. They became my “virtual quality team”.

**Project Team Leader**

08/01 – 02/02

**Chief Engineer, Software**

12/99 – 07/01

Reporting line: Project Manager

Project size: 10 persons

My team: 4 software design engineers

**Major achievements:**

- Developed a Bluetooth protocol implementation from scratch (requirement specification, design, implementation and testing).
- Supported the specification of “Bluetooth SIM Access Profile” (part of the official Bluetooth Specification 1.1).

**NOKIA Oyj, Tampere, Finland**

03/98 – 11/99

**Chief Engineer, Software**

Reporting line: Project Manager

Project size: 10 persons

My team: 3 software design engineers

Task: Develop embedded software for a wireless handset for cars.

**GENERA PROSIGN Oy, Tampere, Finland**

03/93 – 02/98

(Middle-sized company of 10-15 employees. International software subcontractor.)

**Design Engineer, Software**

Projects ranged from office applications to embedded software implementations.

**Major tasks:**

- Maintaining software for released projects (C language, embedded).
- Developing embedded software for external customers (Acting as subcontractor with full project responsibility).
- Cooperating with the customer in all project phases (specification, design, prototyping, delivery and field testing).

## **Certifications and further trainings**

<b>Professional training</b>	<b>1996-2005</b>
<ul style="list-style-type: none"><li>- Personal skills, e.g.<ul style="list-style-type: none"><li>- “Software Inspection Team Leader” training by Tom Gilb, 5 days</li><li>- “Project Management” training by Kepner-Tregoe, 3 days</li></ul></li><li>- Professional skills, e.g.<ul style="list-style-type: none"><li>- “Extreme Programming”, conference in Sardinia, Italy, 2000 and 2001</li><li>- “International Symposium on Software Reliability Engineering”, 2004</li></ul></li></ul>	
<b>University of Technology</b> , Tampere, Finland	<b>1990-1996</b>
<ul style="list-style-type: none"><li>- major: Software Systems</li><li>- minors: Mathematics, Signal Processing, Industrial Management</li><li>- among other things, “Speech and negotiation skills” course</li></ul>	
<b>Master of Science, Engineering</b> in Information Technology	<b>1996</b>
<b>Military service</b> , Sodankylä, Finland	<b>1989-1990</b>
<b>School</b> , Lahti, Finland	<b>1977-1989</b>
<b>High school diploma</b> from Mikkulan Lukio, Lahti, Finland	

## **Special Skills and Knowledge**

### **Languages**

Finnish (mother tongue), fluent in English and German, understand Swedish.

### **Technical skills**

Expert in Java, C/C++ programming languages, Bluetooth communication technology, software quality assurance (formal document inspections, code inspection, metrics), error prevention, software reliability engineering (SRE), extreme programming (XP).

Experiences with Nokia Qt, Symbian, perl, HTML/CSS/Javascript and Visual Basic.

**Inventor/co-inventor** in seven inventions Nokia acquired the rights to patent internationally.