Yanhui Zhao

Senior Radio Developer in Ericsson AB
E-mail: tiger1415926@gmail.com
Tel: +46763350870

Summarize & Competences

- Over 13 years' experience with Matlab, familiar with DSP algorithm by Matlab implementation.
- Strong software skills with C#, VEE and language integration (external call with Matlab/C/C++), familiar with other languages like C++, C, Java, etc.
- Strong software skills with tool script language TCL, familiar with others like shell, python, etc.
- Expertize on automatic test platform development, with very loose coupling structure, support various interface and dynamically components loading.
- Familiar with latest Windows GUI technology WPF application.
- Experience with the Linux system administration.
- Familiar with 3GPP LTE/WCDMA/CDMA/GSM radio standard and Ericsson RBS6000 radio products.
- Familiar with RF instruments (Signal Generator, Spectrum Analyzer, Power Meter, Network Analyzer, etc.) operation and remote control (SCPI command control), also familiar RF measurement methodology.
- Familiar with 3GPP standard 36 series, especially 36.2xx with LTE physical layer (mostly for base station).
- Familiar with radio transceiver structure, digital function of the radio, and interfaces with external devices.
- Familiar with core function fast digital AGC in the receiver, and core function DPD in the downlink.
- Familiar with CPRI, and its Ericsson implementation, also familiar with I2C, SPI and SERIAL interfaces.
- Familiar with ADS RF simulation.
- Team leader and resource planning, and very strong competence in the problem trouble shooting area.

Working Experience

1.	**2014.10 ~ Present**	Ericsson AB. **Gothenburg, Sweden**
	Title	Senior Radio Developer
	Responsibility	Integration team leader of Ericsson **NGR** (**N**ext **G**eneration **R**adio) micro product.
2.	**2012.01 ~ 2014.09**	Ericsson (China) Communication Co., Ltd. **Beijing**, **China**
	Title	System Integration Engineer
	Responsibility	Uplink integration leader of the Ericsson Radio products.
3.	**2011.06 ~ 2011.12**	Ericsson AB. **Gothenburg, Sweden**
	Title	System Integration Engineer
	Responsibility	Responsible for Ericsson platform 5 first radio product HW/SW integration.
4.	**2010.01 ~ 2011.05**	Ericsson (China) Communication Co., Ltd. **Beijing, China**
	Title	System Integration Engineer
	Responsibility	Responsible for the performance optimization of Ericsson Radio products.
5.	**2008.05 ~ 2009.04**	Agilent Chengdu Research Center, **Chengdu, China**
	Title	NPI (New product Input) Engineer
	Responsibility	Responsible for the production test SW development for the CXA N9000 Signal Analyzer. C# is the primary language.

Project Experience

1. **2014.10 ~ Present** **NGR** Micro B1 Development, **Gothenburg, Sweden**

   Project description: 60% smaller and 70% lighter compare to the old one, but with better performance.

   - ✓ Integration team leader, to plan the integration activities and contact person between HW/SW.
   - ✓ All HW components access on the board. SPI low level communication debugging (waveform).
   - ✓ Responsible for the SW function structure DS.
   - ✓ Downlink/Uplink function integration between SW and HW.
   - ✓ Radio performance optimization, calibration method development (Matlab, TCL, VEE)
   - ✓ AGC and DPD function tuning and optimization for the micro product (Matlab).
   - ✓ Drive and involved in several critical task forces, prime contributor to the final solution.

2. **2014.03 ~ 2014.09** **RRUx 82 B40** TD-LTE Radio Unit Development, **Beijing, China**.

   Project description: 1st Ericsson 8 TX and 10G RU designed for CMCC, developed in a very short time.

   - ✓ Leader of uplink integration (from components access to radio performance optimization).
   - ✓ Developed automatic test program for calibration and performance test (Matlab, VEE, C#).
   - ✓ Developed tools for FPGA designer to verify their function.
   - ✓ One of the authors for the uplink design specification for FPGA implementation.
   - ✓ AGC debugging and performance calibration/optimization for the product (Matlab).

3. **2013.08 ~ 2014.10** **RTP** (**R**adio **T**est **P**latform) pre development project, **Beijing, China.**

   Project description: Develop a general test platform for all the radio designers for their verification

   - ✓ Leader of the RTP development team.
   - ✓ Build the SW structure with another colleague, plan resources for the test case development.
   - ✓ Author of digital signal processing external library (Matlab) for C# external calling.
   - ✓ Support various interfaces for the instrument control, and support dynamic test case loading.
   - ✓ Training workshop to other colleagues and to other Ericsson sites (Kista, LN and EMC).

4. **2012.06 ~ 2012.11** mRBS, ACE and A2 (**MSR**) project development, **Beijing, China.**

   Project description: Ericsson platform 5 frequency variant products development for different Band.

   - ✓ Uplink integration responsible for all 3 products, and cover totally 15 products.
   - ✓ Responsible for the calibration and performance optimization. (Matlab + VEE + TCL)
   - ✓ TR trouble shooting for the various problems comes from all other team.

5. **2012.06 ~ 2012.11** Smart LTT test bench pre-development project. , **Beijing, China.**

   Project description: Develop a new smart test system for the radio robustness test, cost saving.

   - ✓ Leader of the SW development for this project.
   - ✓ Take approximately 90% of the coding work in this project (C# + VEE + Matlab)
   - ✓ Improve the efficiency around 20 times and save instrument cost approximately 2M RMB/year.
   - ✓ Real test platform demo show in the Ericsson Technology Day 2012.

6. **2011.06 ~ 2011.12** Platform5 Jango B0 product development, **Gothenburg, Sweden**

   Project description: 1st Ericsson Platform 5 product with better performance compare to the old one.

   - ✓ Responsible for the uplink integration of HW/SW, and also TR solving.
   - ✓ Calibration and performance optimization of the product (mainly uplink part).
   - ✓ New time alignment design specification for the product, new feature verification.
   - ✓ Test program implementation for new features of the product (Matlab + VEE).

7. **2010.01 ~ 2011.05** RIR and Avatar (**MSR**) project development, **Beijing, China.**

   Project description: Ericsson 1st dual TX platform 4 products, and special repeater radio for Korea.

- ✓ **Responsible** for all the uplink and downlink integration for those 2 projects.
- ✓ Released RIR **B5**, and released Avatar **B12** and **B5**.
- ✓ Responsible for the calibration and performance optimization. (**Matlab** + **VEE** + **TCL**)

8. 2008.05 ~ 2009.04 **N9000A** Signal Analyzer test program development. **SiChuan**, **China**

Project description: Build a production test system for Agilent CXA N9000A Spectrum Analzyer.

- ✓ One of the authors builds the new production test platform (C#), to be used in the production line.
- ✓ Developed an internal self-diagnostic program alone (inside the spectrum analyzer in factory mode), improve the fault finding efficiency dramatically during the production.

Honors & Achievements

- **Best Inventor** in Ericsson China R&D of year 2012.
- **Excellent Employee** in Ericsson China R&D of year 2012.
- **Highest IPM score** within the team (totally 22 persons) in year 2011, 2012 & 2014.
- **2 patents** published together with other colleagues.
  - ✓ 1 publication number is: **WO2014032209**
  - ✓ The other one is protective publish.
- **Best evaluation** from the foreign manager during **STA** (**S**hort **T**erm **A**ssignment) in Gothenburg.
- **Candidate** of the best 18 months graduated employees in Ericsson in year 2011.

Education Experience

1. **2003.09 ~ 2010.06** University of Electronic Science and Technology of China, Chengdu, Sichuan, China. **BS** and **MS**.

Achievements:

- ✓ **1st** average point within the whole department.
- ✓ **Highest** class scholarship **every** year.
- ✓ **3rd** prize of Sichuan province for the Math Modeling competition and Program competition.
- ✓ **Recommended** to the graduation school **without** examination.

Language

Fluent spoken English, very little Swedish.

Self-Evaluation

I am a very active person, and have very strong interest in the tele-communication technology. I have background with both HW (especially RF, digital, etc.) and also SW working experience. I have solid understanding about the radio system, and how it is build up by HW components, and how it is works in the real system. I also have rich experience with RF test instruments, and expertized on the Automation Test Platform build up, I can build up a complex automatic test system myself with both HW topology connection and SW implementation. I have passion on my daily work, and optimistic to the obstacles I encountered during my work, I am a very fast learner, and always prepared to learn new things in my daily work or even personal life, meanwhile I am also a very good team member and always willing to share knowledge and discuss with others to achieve improvement whenever possible.