

# Vladimir Iankov Ivanov

Vrabnitsa 1, bl. 534, entr. 1, apt. 18  
Sofia 1229, Bulgaria  
(+359 2) 934 40 98  
vladimir\_ivanov@yahoo.com

## EDUCATION

**Master's Degree, Technical University - Sofia (Bulgaria)** 09 / 1992 -- 09 / 1997  
Faculty of Communication Technics and Technologies Overall GPA: 5.90 / 6.00  
Major: Communication Technics and Technologies  
Specialization: Telecommunication Technologies  
Thesis: *"A Study on Voice Transmission in a Fast Packet Switching Network"* Grade: 6.00 / 6.00

**Professional Qualification, Technical University - Sofia (Bulgaria)** 09 / 1994 -- 07 / 1997  
Open Faculty, evening course of study Overall GPA: 5.44 / 6.00  
Specialty: Management  
Thesis: *"A Study on Modern Logic-probabilistic and Structural Methods in the Technology of Risk Analysis and Risk Management"* Grade: 6.00 / 6.00

**High School of Mathematics and IT, Sofia (Bulgaria)** 09 / 1986 -- 06 / 1992  
Professional qualification: Programmer GPA: 5.85 / 6.00

## ACHIEVEMENTS & AWARDS

- Japanese government scholarship for a two-year specialization at Osaka University (Japan) 1999
- Best Graduating Student award, Class of 1997 at the Faculty of 1997  
Communication Technics and Technologies, TU-Sofia (Bulgaria)
- Fellowship for Highest Academic Achievements, TU-Sofia (Bulgaria) 1992 -- 1997
- Foundation "Eureka" scholarship for Best Student at the Faculty of 1993, 1994  
Communication Technics and Technologies
- Winner (1<sup>st</sup> place) at the Olympiad in Electrotechnics, TU-Sofia (Bulgaria) 1994
- On the team of TU-Sofia, the winner in the group of technical universities 1993  
at the National Olympiad in Mathematics, Sofia (Bulgaria)
- Over 30 participations in Olympiads in Mathematics, Physics, and Chemistry 1985 -- 1992  
with very good results at the national level

## PROFESSIONAL EXPERIENCE

**Alcatel Bell (Antwerp, Belgium)** 05 / 2000 -- 01 / 2003  
**System Engineer, ADSL Modem Team**

- High-level modeling, simulation, and analysis of ADSL transceivers and media:
  - Validated, debugged, and expanded existing models.
  - Developed models of new product releases.
  - Contributed to standardization activities: ADSL for ETSI and ADSL2+ for ITU.
  - Initiated the development of a new simulation architecture.

- Mixed-deployment scenario of ADSL from the central office and ADSL2+ from the remote unit:
  - Performed a feasibility study and introduced a proof-of-concept ADSL2+ transceiver.
  - Measured the performance of the transceivers and analyzed their behavior.
- Design of new product releases of ADSL over ISDN at the central office and the customer site:
  - Adapted and improved the time-domain equalizers.
  - Adjusted and optimized the DSP front ends.
- ADSL system analysis and problem solving:
  - Fixed problems with time-domain equalization, high bit-error rate, and synchronization.
  - Validated and optimized the system performance.
  - Resolved interoperability problems with chipsets of other vendors.
- Other:
  - Evaluated an ADSL chipset of Tioga Technologies.
  - Conducted internal trainings and technology knowledge transfer.
  - Documented the work and the acquired knowledge.

Sparnex CoC (Sofia, Bulgaria)

07 / 1999 -- 04 / 2000

**Design Engineer, R&D Department**

01 / 1998 -- 05 / 1998

- Developed a discrete-time simulator of non-uniformly sampled lumped circuits.
- Designed several signal processing algorithms.
- Performed functional and environmental qualification tests and reliability analysis of a power supply and control unit for a satellite telescope module of the European Space Agency.

SmartCom (Sofia, Bulgaria)

07 / 1996 -- 04 / 1997

**Design Engineer, R&D Department**

- A PABX-serving terminal adapter for ISDN Primary Rate Access:
  - Optimized the analog front end and digital hardware.
  - Redesigned the two-level board system into a single board.
  - Performed EMC measurements and improved the PCB design, leading to a successful EMI certification.
- Designed the clock recovery and front ends of a 2 Mbps converter between AMI and HDB3 codes.

Express Consult (Sofia, Bulgaria)

Summer 1995

- Assembled PC hardware and installed computer networks.

## SKILLS

- System-level design: MATLAB, Simulink, SDL
- Hardware design: PSpice, CADSTAR; spectrum analyzer, oscilloscope
- Software development: C, C++, Visual Basic, Pascal, JScript, Assembly for i8086/51; ClearCase
- Operating systems: Windows, UNIX (SunOS)

## LANGUAGES

English: fluent                      Bulgarian: native  
 Russian: functional                German: fair