

VLADISLAV D. IVANOV

94 Secretariat Court / Tinton Falls, NJ 07724 / 732-208-9000 / vdi@alumni.duke.edu

EDUCATION

Duke University, M. S. in Electrical and Computer Engineering, Durham, NC, January 2005 – December 2006;

- Specializing in Microsystems (Circuits and Devices), Research work in Digital Microfluidic systems and reliability;
- Courses included: Quantum Mechanics, Foundations of Nanoscience, Integrated Circuit Engineering, Analog Integrated Circuit Design, Advanced Digital Systems Design with VHDL, Optoelectronic Devices, Laser Systems, Optical Spectroscopy and Imaging, Electromagnetic Communication Systems, and Biochip Engineering;
- Projects included: Failure mechanisms and reliability of Digital Microfluidic devices; Architecture for implementation of DNA pyrosequencing on a Digital Microfluidics platform.

Duke University, B. S. in Electrical and Computer Engineering, Durham, NC, August 1995 – May 1999;

- GPA of 3.3/4.0, Dean's List for the academic 1995/96 and 1996/97 years;
- Courses included: Electrical Circuits Theory, Linear Systems Theory, Electromagnetic Theory, Optical Communication Systems, Microwave Electronic Circuits, Semiconductor Devices and Integrated Circuits, Full-Custom VLSI Design, Switching Theory and Logic Design (VHDL and Verilog), Computer Architecture, Program Design and Analysis in C++, Artificial Intelligence.

WORK EXPERIENCE

AT&T, Network Engineer, Middletown, NJ, March 2007 – Present;

- Perform analysis, design architecture, and support the monitoring and troubleshooting of calls with the Agilent Technologies Next Generation Network Analysis System (NgNAS) and Quality of Service Manager (QoS). Work with vendor, customer organizations and IT operations to write requirements, provide expertise and assist in deployment, growth and troubleshooting the VoIP network for business and consumer services.
- Responsibilities involve the following:
 - Establish project needs and translate them into impacts to existing production and testing environments;
 - Perform architecture overviews and identify changes to performance gathering and processing components;
 - Define and document exact system and feature requirements for development testing and deployment;
 - Serve as a troubleshooting resource for issues arising from production system use.

Duke University, Research Associate, Durham, NC, January 2005 – December 2006;

- Performed extensive research and experimentation of Digital Microfluidic systems and devices to design new capabilities, applications and improve performance and reliability;
- Projects included chip design, layout and fabrication using glass and PCB substrates, top-plate fluidics interface and sensors integration, reliability study of on-chip dielectric films and capacitive-based monitoring, droplet dispensing and transport parameters, sulfide samples capture and detection using photo absorbance, fluorescence detection of nanoparticles and fluorescently tagged DNA strands, PCR-based DNA sequencing implementation, and more;
- Mentored and advised undergraduate student working on graduation with distinction research projects;
- Managed a research lab to insure productive and safe environment for other students and research members;
- Delivered poster presentations and talks to inform and promote the work to university and industry parties.

AT&T Labs, Senior Technical Associate, Middletown, NJ, June 1999 – October 2004;

- Performed extensive research and development of electronic switching systems through individual effort and teamwork. Planned and defined evolution for the AT&T TDM and VoIP SIP networks to support complex platform capabilities, business and consumer services in a multi-vendor, changing, and competitive environment.
- Responsibilities involved the following:
 - Lead cross-organization work teams to identify needs and concept of new services;
 - Extensive interaction with vendor account and engineering teams to cost-effectively identify and meet needs;
 - Define requirements of the new capabilities, use new or existing architecture to integrate them;
 - Involve operations systems and work center organizations to provide timely support of the new capabilities;
 - Work with vendor, testing and field operations teams to follow projects through a successful deployment;
 - Utilize a quality assurance process, project tracking, documentation and change control tools.

Duke University, System Administrator, Durham, NC, August 1995 – May 1999;

- Supported and maintained a local TCP/IP over Ethernet network of 85 individual and lab systems, administered user accounts on NetWare and Windows servers, PCs, printers and static IP allocation. Performed installation, upgrade, inventory, and hardware/software troubleshooting. Identified needs and established usage policies.