

Yanko Sheiretov, Ph.D.

472 Lincoln St.
Waltham, MA 02451-0849

617-429-2345
yanko@alum.mit.edu



SUMMARY

Seeking a senior position in Electronic Engineering or IT. Highly skilled innovator, leader, and developer of precision instrumentation and software for applications in the Oil & Gas and Aerospace & Defense industries. Holder of an MIT Ph.D. in Electrical Engineering, and 29 granted and 11 pending patents. Expert in analog and digital circuit design, software development, numerical methods and computer simulation, and applied physics. Leadership experience as project manager and Sr. Vice President of product development. U.S. citizen.

EXPERIENCE

JENTEK Sensors, Inc.

1994 – present

Sr. Vice President, Product Development. *Also serving as Lead Electronics and Software Architect.*

JENTEK Sensors provides sensors and instrumentation for internal and external inspection of oil and gas pipelines and in oil refineries; nondestructive testing of materials and components on aircraft and other structures for cracks, corrosion, and aging; characterization of coatings; and many others.

- Leadership: Leader of the electronics and software teams in the successful development of JENTEK's products. In addition to leading the teams, directly involved in all engineering tasks.
- Grant proposal writing: Wrote the proposals and served as principal investigator for 18 SBIR programs, funded by the U.S. government, with a total revenue of about \$8,000,000. Wrote many other winning proposals to commercial customers and non-U.S. governments.
- Project management: Principal investigator, technical lead, and decision maker for a number of government and commercial R&D projects and for product development.
- Scientific and engineering innovation: Inventor or co-inventor of almost all JENTEK core technologies.
 - Electronics: FPGA-based real-time impedance measurement, wide-bandwidth ultralow-noise analog data path, low noise cabling.
 - Software: algorithm for real-time multidimensional inverse interpolation, multidimensional database optimized for fast data storage and retrieval, numerical method used to calculate the sensors' responses from the geometry and the material properties, user interface for data presentation and visualization.
 - Development and modeling of new sensors and measurement procedures, including multiple sensor modalities (inductive, magnetoresistive, capacitive) and geometries.
- Business development: Communicating with clients to define program requirements, product demonstrations, customer training.
- Infrastructure: management of buildings, workstations, communications and other services.

ACADEMIC DEGREES AND CREDENTIALS

Ph.D., Electrical Engineering, MIT, 2001

E.E. (Electrical Engineer), MIT, 1998

GPA: 5.0/5.0

M.S., Electrical Engineering, MIT, 1994

B.S., Electrical Engineering, MIT, 1992

(all degrees)

- First inventor in 5 patents; co-inventor in 24 more; 11 pending.
- Author of multiple scientific articles.
- Ad hoc reviewer for peer-review journals: IEEE Transactions on Dielectrics and Electrical Insulation, IEEE Sensors, Sensors and Actuators, Electronics Letters.

Complete list and web links of patents and publications available at <http://sheiretov.com/yanko/pub.php>

SKILLS AND TALENTS

Problem Solving: I get things right the first time. One of my strongest skills is my ability to quickly identify what lies at the core of a problem or idea and to find creative, efficient, and elegant ways to address it.

Leadership: As a leader, I have been praised for encouraging creativity and independent thinking, taking the time to give detailed explanations when necessary, assign priorities, and articulate clear immediate and long-term goals.

Breadth of Knowledge: Broad knowledge in many fields in addition to my own allows me to see projects and ideas in a wider context and to find creative solutions. I am often the “go-to” person for any question.

Analog and Digital Circuit Design: Experienced in all stages of electronic product development: high level concept, schematic, PCB layout, interacting with mechanical designers, testing and debugging, and transition to production. Particular experience in extremely low noise instrumentation-grade analog front end design. Some experience in FPGA-based design and Verilog, as well as microprocessor firmware.

Software and Algorithm Development: Experienced in commercial software architecture and development, numerical methods and simulation, algorithm development, data modeling and analysis, GUI. Extensive knowledge of many programming languages, such as C++, MATLAB, Visual Basic, PHP, Shell scripts.

Writing: Excellent writing skills, bringing out the most important material and presenting it in the proper larger context, clear and appropriate for the target audience. Very experienced in writing reports, proposals (SBIR and other), grants, papers, and scientific articles.

Computer Skills: At ease with most computer languages, operating systems, and software application suites. Capable of learning a new language or tool very quickly. Plenty of system and network administration knowledge and experience, in both UNIX and Windows.

Electronics and Applied Physics: Expert in electromagnetic waves and fields. Some experience in solid state lasers and devices, testing and microfabrication; quantum mechanics and solid state physics; power electronics; wireless telecommunications.

Languages: Proficient in English, German, Russian, and Bulgarian.