MIKHAIL M. LAVRENTIEV, JR., DOCTOR OF SCIENCE, PH.D., PROFESSOR

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PROFILE:

Innovative scientist and transformational leader with 35+ years of research, teaching and management experience at the Novosibirsk State University, the Siberian Branch of the Academy of Sciences, and internationally.

- Strong leadership, strategic thinking, organizational and communication skills
- Deputy Director for Scientific Researches; Faculty Dean; Scientific Laboratory Chair
- Connected to world-wide network of leaders in the fields of education and science
- Multilingual (English, Russian, Italian)

LEADERSHIP EXPERIENCE:

2018 – PRESENT: DEPUTY DIRECTOR FOR SCIENTIFIC RESEARCH, INSTITUTE OF AUTOMATION AND ELECTROMETRY, SIBERIAN BRANCH OF THE RUSSIAN ACADEMY OF SCIENCES

Coordinate researches of the Institute 8 laboratories in IT.

2001 – 2011 AND 2017 – PRESENT: DEAN OF THE INFORMATION TECHNOLOGIES SCHOOL, NOVOSIBIRSK STATE UNIVERSITY

Charged with academic curriculum and research; led 250+ staff and oversaw academic performance of 750+ students annually.

- Established infrastructure for 4 new Departments and 7 Master's Programs, obtained license for Master's Programs.
- As a result of fruitful collaboration with national and foreign IT companies, joint NSU-Intel and NSU-Parallels research laboratories were set up. Stipends established for students with distinguished academic results from high-tech companies, including Samsung, Schlumberger, Intel, and Parallels.
- Established an academic methodology and cultivated based on it NSU student participation at the world most prestigious ACM student International Collegiate Programming Contest (8000 participant teams from 3000+ universities), sponsored by IBM since the 70s. After 16 competitions, NSU now recognized among the top 30 in student programming world-wide.

2015 – 2018: DEPUTY RECTOR, TECHNOLOGICAL DEVELOPMENT & EXTERNAL RELATIONS, NOVOSIBIRSK STATE UNIVERSITY

Promote cooperation with other national and international scientific and educational organizations and private sector; manage 70+ staff; charged with NSU Information Technology (IT) strategy implementation; oversee IT academic Department and systems and computer classes support to university staff and students, recruitment of foreign students and professors; host international delegations of various seniority levels, including ambassadors.

- Brokered NSU membership at large international alliances such as: New Silk Road (113 colleges & universities in 29 countries).
- Developed online learning platform and curriculum for inter-university collaborative to teach students. Results: more international professors and students joining NSU, including the joint University of Aizu/ NSU program to prepare PhD candidates.
- Successfully piloted foreign students recruitment via a headhunting agency.

2011 – 2015: DEPUTY RECTOR, TECHNOLOGICAL DEVELOPMENT, NOVOSIBIRSK STATE UNIVERSITY

Charged with development and implementation of NSU IT strategy implementation; oversee IT systems and infrastructure support for all education, research and management functions; manage 50+ staff; computer classes support to university staff and students (9,000+ users).

- NSU IT infrastructure significantly developed approaching modern international standards.
- Greatly expanded WiFi coverage of NSU building and campus, twice as more bandwidth provided.
- Successfully implemented a blended learning academic curriculum and supporting technology, resulting after the first year of use via the Moodle platform in 50 actively taught courses and 300+ being customized for the system.
- Brought more than 200 M (Rub) in financing, including a joint project with Parallels Co.

1989 – 2001: DEPUTY CHAIR OF THE APPLIED MATHEMATICS DEPARTMENT

Charged with academic curriculum and led a 17 staff team.

TEACHING EXPERIENCE:

Teaching focus: Calculus, Theory of Complex Functions, Ordinary Differential Equations, IT in Science and Education.

- Delivered 20+ courses to 500+ students at the Departments of Mathematics, Physics, Natural Sciences, and Information Technologies at NSU.

2001-PRESENT: PROFESSOR AND CHAIR OF THE SYSTEMS OF INFORMATICS DEPARTMENT, NSU

1988 – 2001: ASSOCIATE PROFESSOR OF THE APPLIED MATHEMATICS DEPARTMENT, NSU

1979 – 1988: ASSISTANT PROFESSOR OF THE APPLIED MATHEMATICS DEPARTMENT, NSU

- Visiting professor at 11 Universities worldwide: Freie Universität Berlin (Germany), University of Padova (Italy), Milan University (Italy), University "Roma Tre" (Italy), Institute of Global Analysis (Florence, Italy), University of Maryland at College Park (Washington DC, USA), Pacific Marine Environmental Laboratory (USA National Ocean and Atmosphere Administration, Seattle, USA), National University of Singapore, University of Wollongong (Australia), University of Tokyo (Japan), Keio University (Japan).

RESEARCH EXPERIENCE - SIBERIAN BRANCH, RUSSIAN ACADEMY OF SCIENCES (SB RAS)

Research Focus: Qualitative Theory of Differential Equations. Direct and Inverse Problems. Nonlinear equations, Degenerate equations, Equations with integral terms. Applications in Geo Sciences. Mathematical Simulation in Chemistry. Computer graphics for PC.

1998 – PRESENT: CHAIR OF COMPUTER GRAPHICS SOFTWARE LABORATORY, INSTITUTE OF AUTOMATION AND ELECTROMETRY SB RAS

- Lead 17 staff in developing software tools and hardware solutions for various applications of Virtual reality. Partners include: Yu.A. Gagarin Research & Test Cosmonaut Training Center, JSC 1C, and others.

1993 – PRESENT: LEADING RESEARCHER, SOBOLEV INSTITUTE FOR MATHEMATICS SB RAS, RUSSIA

- (Co)-author of 160+ publications and 3 monographs, cited in 20+ journals, frequent speaker at international conferences in Russia and abroad.

1991 – 1993: SENIOR RESEARCHER, SOBOLEV INSTITUTE FOR MATHEMATICS SB RAS

1986 – 1991: RESEARCHER, SOBOLEV INSTITUTE FOR MATHEMATICS SB RAS

1980 – 1986: JUNIOR RESEARCHER, SOBOLEV INSTITUTE FOR MATHEMATICS SB RAS

1978 – 1980: TRAINEE-RESEARCHER, SOBOLEV INSTITUTE FOR MATHEMATICS SB RAS

EDUCATION & CERTIFICATION:

2012: **Professor,** Supreme Attestation Commission, Council of Ministry, Russia
1993: **Doctor of Science, Physics/ Mathematics,** Supreme Attestation Commission, Council of Ministry, Russia
1988: **Associate Professor**, **Department of Applied Mathematics**, Novosibirsk State University, USSR
1982: **Ph.D. in Physics/Mathematics**, **Differential Equations,** Novosibirsk State University, USSR
1978: **Professional in Mathematics&Mechanics**, Novosibirsk State University, USSR

PUBLICATIONS:

200+ publications in lead scientific journals including Q1, 18 in Scopus database for the last 5 years

AWARDS:

2015   Principal Investigator, Research contract, Novosibirsk Technological Center of Schlumberger for code acceleration
2013- 2015   Principal Investigator, Contract with the International Holding Parallels (according to the Ruling 218 of the Russian Federation Government), Software Tools for Automation of Cloud Hosting
2013   Principal Investigator, Contract with Pacific Marine Environmental Laboratory, NOAA, Seattle, DART station optimal positioning
2009   Principal Investigator, State Contract #2009-1.1-223-009 with Federal Agency of Science and Innovation (Russia) in informatics
2007   Principal Investigator, State Contract #02.515.11.5076 with Federal Agency of Science and Innovation (Russia) in geosciences
2005   Principal Investigator, joint award of Federal Agency of Science and Innovation (Russia) and CRDF (USA) in geosciences
2003   M.A.Lavrent'ev's award of the Russian Academy of Sciences for researches in Mathematics and Mechanics.
2001   Principal Investigator, Civil Research and Development Foundation (USA), grant in Geosciences
2000   Principal Investigator, grants of Russian Foundation for Basic Researches in mathematical simulation for geosciences, awards numbers: 98-05-65280 and 01-05-64704
1998   Cariplo / Landau Network – Centro Volta Fellowship for Russian Scientists
1996   Russian President Grant for Young Professors
1990   First award for Basic Researches by Siberian Division, Russian Academy of Sciences, with co-workers.

Professional Membership and Affiliations:

- Member of Academic Councils of: NSU, IT School, College of Informatics, Specialized High School, Institute of Automation and Electrometry SD RAS; Editorial board of the NSU Bulletin and Russian Journal of Cybernetics: Informatics; member of PhD defense councils; Director of the Pottosin's Open All-Siberian Student Programming Contest

Languages:

- **English** (proficient) **Russian** (native) **Italian** (basic)