MILOS SZTIPANOV, PhD

Physicist

CONTACTS

New Jersey/New York
milostipanov@gmail.com
meteorids.github.io
USA citizen

TECHNICAL SKILLS

MacOS, Linux, Microsoft, Unix, Bash, Git, Python, Machine Learning, GNU Octave, LaTex, Matlab, AccuRT, Soldering.

LANGUAGES

English Fluent
Hungarian Fluent
Russian Intermediate proficiency
Serbian Intermediate proficiency

PROFILE

My previous research topics included radiative transfer, atmospheric physics, biophysics and sequence aligning algorithms. After finishing my BSc. I have been doing research in the field of radiation transfer and atmospheric physics. Currently developing an algorithm for retrieving atmospheric aerosol optical depth and microphysical properties with machine learning and multi-channel irradiance measurements. In my research I utilize radiative transfer methods, machine learning, simulations, coding, ground based measurements and satellite data.

EDUCATION

Stevens Institute of Technology /USA/ — 2015 - 2023
I was on an assistantship program provided by the university. I completed my M.Sc. and Ph.D. during my time at SIT. Besides doing research in radiative transfer and atmospheric physics under the supervision of Prof. Knut Stamnes, I was a Laboratory Supervisor, Teaching Assistant and Research Assistant at the institute. For more details please refer to my research interest.

Codecademy — 2022 - Present
Currently completing Data Scientist: Machine Learning Specialist career path on Codecademy.

Eötvös Lóránd Science University /HUN/ — 2008 - 2012
I have earned my Bachelor's Degree from physics with a theoretical physics concentration. I have received scholarship from the university throughout my studies here. I wrote my diploma thesis about the theory of sequence aligning algorithms. Besides a great theoretical education I received a high level laboratory experience by finishing six laboratory courses.

Reformed High School of Sárospatak /HUN/ — 2004 - 2008
Focus on Math, Physics and Biology. Done research about the mechanisms of photosynthesis inhibitor compounds using chemical experiments.

RELATED EXPERIENCE

LABORATORY SUPERVISOR
Stevens Institute of technology, Hoboken, NJ, USA — 2023
Physics Educational Laboratory at Stevens Institute of Technology. Besides supervising seven teaching assistants, I was overviewing experiments, experimental equipment and I was responsible for managing, modernizing and executing the operations of the Physics Educational Laboratory.

MILOS SZTIPANOV, PhD

Physicist

CONTACTS

New Jersey/New York
milostipanov@gmail.com
meteorids.github.io
USA citizen

RESEARCH/TEACHING -ASSISTANT / LABORATORY INSTRUCTOR

Stevens Institute of technology, Hoboken, NJ, USA — 2015 - 2023

Research in radiative transfer and atmospheric physics. Taught four different courses; General Physics, Mechanics, Electromagnetism and Physics Laboratory for Scientists.

INSTRUMENT TESTING FOR BALLOON BORN RADIATION MEASUREMENTS

New Jersey, USA — 2015

Carried out testing of the NILU Cube instrument before deployment (Colorado, USA) in 2015 Summer.

PERSONAL TUTOR IN PHYSICS AND MATHEMATICS

Budapest, Hungary — 2009 - 2015

Worked as a private tutor and prepared high school students for their state exam and matriculation.

RECENT PUBLICATIONS & CONFERENCES

Milos Sztipanov, Wei Li, Arne Dahlback, Jakob Stamnes, Tove Svendby, Knut Stamnes, ***"New method for retrieval of aerosol optical depth from multichannel irradiance measurements",*** Optics Express (2023)

Milos Sztipanov, **"*Methods of ozone amount, cloud and aerosol optical depth from ground-based irradiance measurements*",** Dissertation (2023)

International Radiation Symposium - Speaker
Thessaloniki, Greece (2022)

Milos Sztipanov, Lubna Tumeh, Wei Li, Tove Svendby, Arve Kylling, Arne Dahlback, Jakob J. Stamnes, Georg Hansen, and Knut Stamnes, ***"Ground-based measurements of total ozone column amount with a multichannel moderate- bandwidth filter instrument at the Troll research station, Antarctica",*** Appl. Opt. 59, 97-106 (2020)