

# Volodymyr Shatalov

Data Science and Financial Mathematics Expert

+38 050 211 4531

Freelancer, On the Web

Slavutych, 07100, Ukraine

https://vshatalov.github.io/

#### Who I am

I am a former professor of theoretical physics (see my papers <a href="here">here</a>) now working as a Python developer in the Data Science domain (see my Portfolio, CV, and Feedback <a href="here">here</a>). I am skilled in Statistics and Financial Mathematics.

#### What I want

Remote or part-time job in the Data Science domain, possibly as a counsellor on Data Science or Financial Mathematics. My rate is negotiable according to market value.

#### What I can

During the last decade I worked on Data Mining, Statistics, Machin Learning, Mathematical Modelling, and other Data Science projects (see my Portfolio).

# Samples of previous work

- <u>Lifetime Wellbeing Calculator</u>
- Satellite View Period Ratio for Circular and Elliptical Orbits
- UVGI Scientific Calculator
- Market Prices Forecast (Daily Stock Trading)
- Sales Forecast
- Stock Market Analyzer
- Shiny Asset Assess
- Ask Twitter Keywords (Tweets Sentiment Analysis)
- Al Telegram Chatbot pre-trained on custom documents

## My Skills

- Python
- R programming
- R-Shiny
- MATLAB
- UX/UI
- HTML, CSS, JS

- Machine Learning
- Time Series Analysis
- Trading Algorithm
- Predictive Model Fitting
- Natural Language Processing
- Neural Networks

## My Education

Dec 1990 – May National Academy of Sciences of Ukraine

1991 Dr.Sci., Dr.Sci. thesis "Effects of the band structure of solids in the

inelastic scattering of slow electrons", Kiev, Ukraine

*Nov* 1976 – *Dec* 1976 **Donetsk University** 

PhD, PhD thesis "Quasi-stationary excitons in covalent

semiconductors", Donetsk, Ukraine

Nov 1972 – Nov National Academy of Sciences of Ukraine

1975 Dr. Ph., Theoretical Physics, Donetsk, Ukraine

Sep 1965 – Jul 1970 Southern Federal University

MSc, Theoretical Physics, Rostov-na-Donu, Russia

## My Experience

Dec 2016 - present Counselor on Data Science, Mathematics, Physics

Artificial Intelligence, Statistics, Mathematics, Computer Sciences

*Sep* 2014 – *Aug* 2018 **Professor** 

National Technical University of Ukraine Kiev Polytechnic Institute,

Department of Automatic Information Processing and Control

Systems, Slavutych branch, Ukraine. Data Science, Decision Theory,

Theory of Algorithms, Web-design, System Analysis.

*Sep* 1999 – *Aug* 2014 **Professor** 

Donetsk University, Department of Biophysics, Vinnitsa, Ukraine.

Theory of the biological impact of low electromagnetic fields.

Molecular structure and dynamics of air/water interface.

*Nov* 1975 – *Aug* 1999 **Scientific Research Worker** 

National Academy of Sciences of Ukraine, Department of Dynamic

Properties of Complex Systems, Donetsk, Ukraine.

Electronic structure of semiconductors, photon emission, etc.

## **Publication Highlights**

- Ilia Reznik, Vladimir Shatalov: *Hidden revolution of human priorities: An analysis of biographical data from Wikipedia*. Journal of Informetrics 01/2016; 10(1):124-131., DOI:10.1016/j.joi.2015.12.002
- V. M. Shatalov: [Mechanism of the biological impact of weak electromagnetic fields and in vitro effects of degassing of blood]. Biophysics 01/2014; 57(6):808-813., DOI:10.1134/S0006350912060152
- Vladimir M. Shatalov, A. É. Filippov, Inna V. Noga: *Bubbles induced fluctuations of some properties of aqueous solutions*. Biophysics 08/2013; 57(4)., DOI:10.1134/S0006350912040161
- Valerii Sukhmanov, Vladimir Shatalov, Juliya Petrova, Adriana Birca, Liviu Gaceu: *The influence of high pressure on bio-system reaction kinetics and the Preservation of vitamin C.* LWT- Food Science and Technology 01/2013; 58(2)., DOI:10.1016/j.lwt.2013.01.012
- Olga V. Gornostaeva, Vladimir M. Shatalov, Yurii G. Pashkevich: *FeO double-well potential as a result of spin density redistribution*. JETP Letters 04/2009; 89(4):167-169., DOI:10.1134/S0021364009040018
- V. V. Rumyantsev, V. M. Shatalov, G. Ya. Misuna: *Gas separation of hydrogen isotopes by means of multicell metal membrane\** 1. Desalination 08/2002; 148(1-3):293-296., DOI:10.1016/S0011-9164(02)00719-1
- S V Bespalova, A M Mishchenko, V M Shatalov: [Transformation of chemical energy in biomolecular systems with hydrogen bonds]. Biofizika 03/2002; 47(2):236-44.
- V.V. Korablev, Yu.A. Kudinov, O.F. Panchenko, L.K. Panchenko, Vladimir Shatalov: *Bandstructure and interelectron interaction in low-energy spectra of secondary-electron emission of surfaces* (100),(110) and (111) of tungsten. Fizika Tverdogo Tela 01/1994; 36(8):2373-2380.
- O. F. Panchenko, L. K. Panchenko, V. M. Shatalov, V. I. Silant'ev, N. A. Shevchenko: *Low-energy total-current electronic spectroscopy of molybdenum*. Physics of the Solid State 01/1994; 36:975-976.