




Dr Vitalii Shkoldin

Python | Data enthusiastic | Physicist

Yerevan (Armenia) or Remote

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Physicist and python-programmer. Know different approaches to experiment and easy to learn how to work with new equipment and get new knowledge.

Experience

ITMO University

May 2017 - Dec 2022 | Research engineer

- Scanning electron microscopes (work and maintenance, ultra-high vacuum)
- Scientific research (light emission, nanomechanics)
- Signal coupling different equipment
- DIY equipment based on Arduino (Pulse counter, DAC, move control)
- Revers engineering TCP communication protocol and writing python fake server

Alferov University

May 2017 - Oct 2022 | PhD student

- Scanning tunneling microscopes (work and maintenance)
- Investigation of light emitted tunnel junction
- Supervising Master's students project about nanomechanics
- Scientific Articles, scholarships, grants and conferences

"NT-SPb" Surface probe for nanotechnology

May 2018 - Sep 2022 | Engineer

- Business trips and remote microscopes installation
- Conducting workshops and education schools on SPM
- Custom improvement of microscopes

Side jobs

... - 2017

Online Pet Store Zoo.SPB.ru

- web-site from A to Z (Joomla, Virtuemart, Setup, design, up-to-date)
- Open Source ERP and CRM (Setup, synchronization, modification)
- Coupling with "Ingit": transport logistic system for delivery (Route planing, time-planning, sms-notification (30 min precision), PostGIS

Dormitory internet provider

- iptables, TraffPro billing tool
- network administration

Freelance:

- Python-automation of data-analyze and fetching
- Telegram text-quest bot

Courses

- Data Analyze (Stepik)
- Python basics and application (Stepik)
- Quick start guide to SQL (LinkedIn)

Skills

Familiar with

Python:

- Pandas • Matplotlib
- Numpy • Seaborn
- PySerial • BeautifulSoup4

PyCharm, LabView, Arduino, ESP8266, Advanced Excel, Debian Linux (advanced) LAMP, SSH, Inkscape

Basics

AutoCAD, SolidWorks, CNC, SQL, C++, html/CSS, Electrical circuits

Languages

- English (B2)
- Russian (Native)

Education

PhD in Physics

Condensed-matter physics

June 2022 | ITMO University

M.Sc. & B.Sc

Electronics and nanoelectronics

2011 - 2017 | St. Petersburg

Polytechnic University

Soft Skills

- Time Management
- Team Work
- Logical Thinking
- Problem Solving
- Critical Thinking