




Dr. Vlas Sokolov

Data Scientist

-  24 April 1991, Ukraine
-  Munich, Germany
-  vlas.sokolov@mpg-alumni.de
-  (+49/0) 174 83 22 851
-  Homepage: vlas.dev
-  GitHub profile: [vlas-sokolov](https://github.com/vlas-sokolov)
-  Stack Overflow: [profile link](#)

About me

I am a data scientist, data engineer, and a software developer with strong background in quantitative sciences. I enjoy tinkering with data processing, machine learning, statistical methods, and data visualization. With strong academical, analytical and programming backgrounds, I am keen to apply my skills to real-world datasets, using modern Python data analysis tools and cutting-edge numerical methods.

Skills

Python ML stack: Python, numpy, scipy, scikit-learn, nltk, pandas, matplotlib

Cloud infrastructure: AWS Lambda, S3, SQS, EC2, CloudWatch

Databases: NoSQL, MongoDB, Elastic-search, RDF, SPARQL, Redis

DevOps: CI/CD, git, Travis, Docker, Serverless

Languages

FLUENT: English

NATIVE: Ukrainian, Russian

INTERMEDIATE: German, Chinese

Work Experience

- 2020–current Solita Germany GmbH Germany
Data Scientist & Data Engineer
- 2018–2020 INNOSPOT GmbH Germany
Data Engineer
 - Designed, developed, and maintained data processing pipelines
 - Led development of machine learning solutions in production environment
 - Developed and maintained cloud microservices, APIs, and CI/CD pipelines
 - Optimised performance on search and database components
 - Set up dedicated monitoring dashboards for cloud services
 - Conducted code reviews and supervised other team members
- 2014–2018 Max Planck Institute for Extraterrestrial Physics Germany
Doctoral Researcher
 - Analysed astronomical maps of Galactic star forming regions
 - Applied clean coding practices while routinely building data reduction pipelines for large astronomical imaging and spectral datasets
 - Actively contributed to open-source packages (pyspeckit, astropy, matplotlib)

Education

- Sep 2014 – Aug 2018 Ludwig-Maximilians-Universität München Germany
Ph.D.; Astrophysics
- Sep 2012 – Aug 2014 National Tsing Hua University Taiwan
M.Sc.; Institute of Astronomy
- Sep 2008 – Jul 2012 National Chiao Tung University Taiwan
B.Sc.; Dept. of Electrophysics

Portfolio

- Grid-search optimization for initial values of gradient descent algorithm (Python, numpy; [GitHub link](#))
- Bayesian inference and model selection package for large spectroscopic datasets (Python, nested sampling, Open MPI; [GitHub link](#))
- Co-author on a multivariate clustering method for astrophysical applications (Python; [GitHub link](#))
- Co-author on a nonlinear regression package for astrophysical spectral lines (Python, [GitHub link](#))

Academic Expertise

- Experience in independent academic research ([list of publications](#))
- Talks at multiple domestic and international conferences
- Years of hands-on expertise on modelling faint features in noisy datasets
- Deep understanding of statistical methods and concepts
- Capacity for independent analysis and self-reliant problem-solving skills

Certifications & Online Courses

- 10 weeks Computer Vision Nanodegree (Udacity)
- 10 weeks Intro to Machine Learning (Udacity)
- 4 weeks Computing for Data Analysis (Coursera)