

# Nikolay (Veldyaykin) Veld

## Curriculum Vitae

Bachelor and senior student (until June 2021) on the master's programme "Data Science" in Higher School of Economics and a creative person desiring to develop new things and automate frequent activities who have technical, business, and interpersonal skills for the successful development of a digital product. I can obtain new skills and learn new technologies easily enough even with poor documentation. Moreover, I can provide constructive comprehensive feedback for someone who appreciates it.

### Previous Employment

- Apr. 2019 – **Software Developer**, *BigData Team*, mostly remotely in Moscow.
- Apr. 2021 – Also DevOps(Docker, Salt Stack, Gitlab CI/CD) and Technical Support responsibilities. Developing in Python(including web development), JavaScript, Google Script (Apps Script + Formulae). Automation and infrastructure tasks (including new products development and support), tools and materials (from programming assignments to internal documents) reviewing, both public and internal instructions creating. Also managed the development on outsourcing
- July 2018 – **Data Science Internship (C#)**, *Tinkoff Bank*, Moscow.
- Aug. 2019
- Oct. 2017 – **Teaching Assistant to "Digital literacy"**, *Higher School Of Economics*, Moscow.
- May 2019 – I worked as a student work rater, a course infrastructure provider, the other assistants' leader
- Feb. 2018 – **Teaching Assistant to "Computer analysis of artistic texts"**, *Higher School Of Economics*, Moscow.
- Dec. 2018 – I was responsible for the rating system, grading students' work, topic selection.

### Education

#### Academic Qualifications

- 2019–2021 **Master's Programme "Data Science" (MSc)**, *Higher School of Economics*, Moscow, GPA 9.89 out of 10.
- 2015–2019 **Bachelor's Programme "Applied Mathematics and Information Science" (BSc)**, *Faculty of Computer Science, Higher School of Economics*, Moscow, GPA 9.64 out of 10.

#### Professional Development

- o "Best practices in Python development" and "Machine Learning" – *BigData Team*  
Own knowledge revision, some new facts and techniques, the creation of the lists with problems and suggestions
- o "Machine Learning" on Coursera – *Stanford*
- o "Big Data Analysis: Hive, Spark SQL, DataFrames and GraphFrames" on Coursera – *Yandex (BigData Team)*  
Passed before the employment.
- o "Big Data Essentials: HDFS, MapReduce and Spark RDD" on Coursera – *Yandex (BigData Team)*  
Passed before the employment. (With honors.)

### Notable Projects

- o **Master and bachelor thesis:** "Translation Between Sign Language and Symbolic Recording.", Python + Web Stack  
I prepared the dataset including the development of crowdsourcing tool, introduced and developed the way of the text2sign translation, developed the demo application and wrote the articles. I and my co-authors were invited to make presentation on ACM PETRA, TSP and AIST (our work was published in LNCS, the work presented by me).

#### Projects developed by only me (some with and some without a mentor):

- o "Virus model evaluation framework", Python
- o "Search, Aggregation and Recommendation Construction of Scientific Events",  
Python + Web Stack + Selenium
- o Several path finding algorithms on C++
- o "Laplacian Eigenmaps algorithm for out-of-sample points", Python  
I presented it on ITAS'17 in the long speeches section.
- o Interactive view and control panel in Unity, C#
- o Prototype of automatic curtains with manual and remote control
- o "Inertial navigation system corrected by odometer", C# and C

### Technical and Personal skills

#### Languages

Russian – ●●●●●●  
English – ●●●●●●  
German – ●●●●●●  
Dutch – ●●●●●●  
Chinese – ●●●●●●

#### Programming and Layout Languages

●●●●●● : Python, Markdown  
●●●●●● : C#(close to Java, + Microframework),  
C, Google Script, SQL, Matlab, HTML  
●●●●●● : C++, JavaScript(plain, jQuery),  
TeX, CSS  
●●●●●● : Assembly

#### Industry Software Skills

●●●●●● : Docker, Git, SSH, NGINX, Unity  
●●●●●● : Linux, MS Visio, matplotlib/Flask/  
sklearn/NumPy/SciPy/Pandas/  
PyYAML, Salt Stack, MongoDB  
●●●●●● : PyTorch, NLP software, Selenium,  
Node.js, scrapy/sphinx, Blender

**General Skills, Experience:** presentation, organizational, tenacious in solving, basic business processes analysis (+UML), ability to give expert-like assessment of many things, ability to improvise, not afraid to receive/give negative feedback as well as positive

## Honor and Awards

- o Ilya Segalovich Scholarship (2020, Yandex and Higher School Of Economics)
- o "Best teacher assistant" (2018, Higher School Of Economics, awarded since 2018)
- o Increased State Academic Scholarship for research activities (2020), for academic performance (2019), for social activities (2017) (Higher School Of Economics)

## Interests and extra-curricular activity

- o One of my hobbies is microelectronics. Referring to the "Notable project" section I pack and connect hardware plus develop software for the *prototype of the automatic curtains with manual and remote control*. Also I develop and deploy the *inertial navigation system corrected by an odometer*. One of the last projects is flashing a smart plug with an alternative firmware and developing the software that allows turning on/off laptop charging (the only current found analog offers this feature but it does not work and the code is private).
- o In spare time I like fixing some code, opening issues and helping with other issues in the *Github* repositories. In addition I answer questions (including quite specific ones) plus edit other posts on *Stackoverflow* that appeared during my work or educational activities. Sometimes I post on *Stackoverflow* ways of overcoming issues that can be faced by other developers.
- o I was a head "fresher representative" in my 2nd and 3rd years of university, this required me to guide, look after, and ensure that a particular first years students group have a good time in their first term. My supervisory function consisted of the responsibility for all faculty of mine "fresher representative", calling organizational meeting and material supply.
- o Other social work: some all-Russian and global events including IDAO 2018, ACM-ICPC 2015-2017 and CLA 2017 and was promoted to volunteer-organizer; member of Student Council.
- o Sports: orienteering (II adult rank in Russia), swimming (maximal distance 6150 m, III adult rank in Russia); also like cycling, basketball, skiing + roller skiing and other.
- o Other interests: engineering, manual labor (repairing and construction), recycling and "conscious" consumption.

## Publications

I. Makarov, N. Veldyaykin, M. Chertkov, and A. Pokoev. Russian sign language dactyl recognition. In *2019 42nd International Conference on Telecommunications and Signal Processing (TSP)*, pages 726–729, July 2019.

Ilya Makarov, Nikolay Veldyaykin, Maxim Chertkov, and Aleksei Pokoev. American and russian sign language dactyl recognition. In *Proceedings of the 12th ACM International Conference on Pervasive Technologies Related to Assistive Environments, PETRA '19*, page 204–210, New York, NY, USA, 2019. Association for Computing Machinery.

Ilya Makarov, Nikolay Veldyaykin, Maxim Chertkov, and Aleksei Pokoev. American and russian sign language dactyl recognition and text2sign translation. In W. M. P. van der Aalst et al., editor, *Analysis of Images, Social Networks and Texts*, pages 309–320, Cham, 2019. Springer International Publishing.

Nikolay Veld. How to setup nginx to serve several services through one port. article 1: nginx.conf. <https://www.codeproject.com/Tips/5275652/How-to-Setup-NGINX-to-Serve-Several-Services-Throu>, 2021. Accessed: 2021-04-26.

Nikolay Veld. Virus model evaluation framework. In W. M. P. van der Aalst et al., editor, *Recent Trends in Analysis of Images, Social Networks and Texts*, pages 303–306, Cham, 2021. Springer International Publishing.

N. Veldyaykin and Y. Yanovich. Algoritm laplacian eigenmaps dlya tochek vne obuchayushchei vyborki. In *ITiS'17 (In Russian)*, pages 74–80, 2017.