Dmitry Penzar
Bioinformatician, ML enthusiast, teacher

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The online version is available at
 https://dmitrypenzar1996.github.io/resume

Residence
Moscow

Github
github

Email
dmitrypenzar1996@gmail.com

Python	+++++	R	+++++	C/C++	+++	Golang	++	Statistics	+++++	Classical ML	+++++
Deep learning	++++	Algorithms	+++++	Molecular biology	++++	Biochemistry	+++	Bioinformatics	+++++	English (speaking)	+++
English (technical literature)	+++++										

ML enthusiast

Professional Experience

Department of Computational Systems Biology, VIGG RAN

June 2017 - Current

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Advisor: Dr. Ivan Kulakovskiy.
Classical ML and Deep Neural Networks application for the regulatory mutations effect
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`ML` `biology` `healthcare`

Belozersky Institute of Physico-Chemical Biology, Department of Mathematical Methods in Biology

September 2016 - June 2017

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Advisor: S.A. Spirin
We developed a novel program, named PQ, for reconstructing protein
and nucleic acid phylogenies following a new character-based principle.
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`C/C++` `phylogeny` `software development`

Internship in Netherlands, LUMC, Molecular Epidemiology, Department of Medical Statistics and Bioinformatics

July 2016

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Advisor: Dr. Szymon Kielbasa
R-Shiny based NGS data quality control and outliers detection toolkit Zeeuw
```

`R` `NGS` `software development`

Technosphere, Mail.Ru Group

October 2016 - December 2017

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   Intense two-year program by a leading Russian IT company.
   Within the program, I participated in different ML Kaggle competitions,
   aquired a huge experience in ML and software development, deepened knowledge of C/C++.
   I quited from the third semester of the program due to job offer from Insilico Medicine
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Developer in startup curated by AIAR Labs Inc, department of machine learning

August 2017 - October 2017

```
   NDA
```

`ML` `DNN` `software development`

Developer in InSilico Medicine, department of machine learning

November 2017 - August 2018

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   I've been working on generating new drugs using deep neural networks
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`ML` `DNN` `drug design` `software development`

Education

Lomonosov Moscow State University, Faculty of Bioengineering and Bioinformatics. 2013 - 2019. specialist degree, GPA - 5/5

VIGG, Department of Computational Systems Biology, 2019-2023, phd degree

Publications

Insights gained from a comprehensive all-against-all transcription factor binding motif benchmarking study

The species Severe acute respiratory syndrome-related coronavirus: classifying 2019-nCoV and naming it SARS-CoV-2

H3K4me3, H3K9ac, H3K27ac, H3K27me3 and H3K9me3 Histone Tags Suggest Distinct Regulatory Evolution of Open and Condensed Chromatin Landmarks

Integration of Multiple Epigenomic Marks Improves Prediction of Variant Impact in Saturation Mutagenesis Reporter Assayheader

Retroelement—Linked Transcription Factor Binding Patterns Point to Quickly Developing Molecular Pathways in Human Evolution

What Do Neighbors Tell About You: The Local Context of Cis-Regulatory Modules Complicates Prediction of Regulatory Variants

PQ, a new program for phylogeny reconstruction

Profiling of Human Molecular Pathways Affected by Retrotransposons at the Level of Regulation by Transcription Factor Proteins

Additional Experience

Additional courses

I've attend a huge variety of additional courses, including: 1. Categorial grammar 2. Neuroscience and neuromarketing 3. Macromolecular modeling 4. Pattern recognition 5. Mathematical models in biology 6. Mathematical linguistics

ecomomics | linguistics | mathematics

Teacher

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  I've been trying to take part in teaching since I was a third-year student. Firstly, I've
started as an teacher assistant,
  then — as one of the course authors, now I'm continue to teach different courses, including
those led by me.
  Short list of courses I'm taking part in:
  1. Algorithms
  2. Machine learning in biology (the course led by me)
  3. Introduction to Python
  4. Advanced Python
  5. Deep learning in science
```

teaching | communication | team leader