EVGENIIA CHIKINA

I am Bioinformatic Master student who previously graduated from Medical University. I use all of my medical and biological knowledge to combine with the world of computer science. At the moment I have especially good knowledge and skills in analyzing RNA sequencing data. Now and in the future I try to develop and gain knowledge in various aspects of bioinformatics, in particular in such areas as: RNAseq, epigenetics, multi-omics data analysis.

EDUCATION

Current 2020

Master degree, Applied Mathematics and Informatics, Bioinformatics and System Biology

ITMO University

Saint-Petersburg, Russia

- Thesis: Metabolic Modules Identification in Single-Cell Data
- Course Project: Identifying Metabolic Modules in TCGA Datasets
- Semester Project: Effects of Background RNA Noise on Differential Expression Results in scRNA-seq

2020 2014

Specialist degree (with honors), Pediatrician

Saint-Petersburg State Pediatric Medical University

Saint-Petersburg, Russia

Pediatrician



RESEARCH PROJECTS

Current 2021

Metabolic Modules Identification in Single-Cell Data

ITMO University

Saint-Petersburg, Russia

- · Thesis
- Main goal of the project is to extend applications of the GAM-clustering tool on the single-cell RNA-seq data. In order to find optimal clustering algorithm performed and analysed multiple clustering strategies for the single-cell RNAseq data. Used trajectories and gene set enrichment analysis for biological interpretation of the results. Involved in the modification of the tool.

2021

Identifying Metabolic Modules in TCGA Datasets

ITMO University

Saint-Petersburg, Russia

- Course Project
- With previousy developed GAM-clustering algorithm analyzed TCGA datasets (LUSC) - bulk RNA-seq data. Identified metabolic modules and performed biological analysis of them. During work was involved in the modification of the tool and testing.

View and download the latest version of this CV with links at https://github.com/JaneChik/cv or here

CONTACT

github.com/JaneChik

in evgenia_chikina

SKILLS

Python Bash

LANGUAGES

Made with the R package pagedown.

The source code is available on github.com/nstrayer/cv. Modified source code for this CV is available

Last updated on 2022-06-14.

Effects of Background RNA Noise on Differential Expression Results in scRNA-seq

ITMO University

Saint-Petersburg, Russia

• Performed standart analysis of the single-cell data with Seurat pipeline and integration of multiple samples using SCTransform intgration. With help of DropletUtils R package identified ambient RNA and tried to estimate the impact of it on the differential expression results.

OTHER PROJECTS

2022

DiveR ShinyApp

Perdana University (Students Project)

- DiveR is a graphical user interface (GUI)-based web application hosted on R Shiny for the visualization of DiMA results, a tool designed to facilitate the dissection of protein sequence diversity dynamics for viruses.
- Modifications of ShinyApp scripts
- https://github.com/pendy05/DiveR



CONFERENCES

2018

Nationwide scientific forum of students and young scientists with international participation «Student science - 2018»

Saint-Petersburg State Pediatric Medical University

Saint-Petersburg, Russia

- Research Work: "Study of microbiological landscape and microorganism susceptibility analysis to antibacterial drugs in the neonatal and premature infants intensive care department, cardiac intensive care department and neonatal pathology department for the period from 2014 to 2017"
- Pharmacology Section: 3d degree diploma



PUBLICATIONS

Gainullina A., Chikina E., Mogilenko D. et al. Open Source ImmGen: network perspective on metabolic diversity among mononuclear phagocytes, bioRxiv 2020.07.15.204388; doi: https://doi.org/10.1101/2020.07 .15.204388 (under review)

ACHIEVEMENTS

2021

NGSprint Hackaton

NGSchool

Object, online

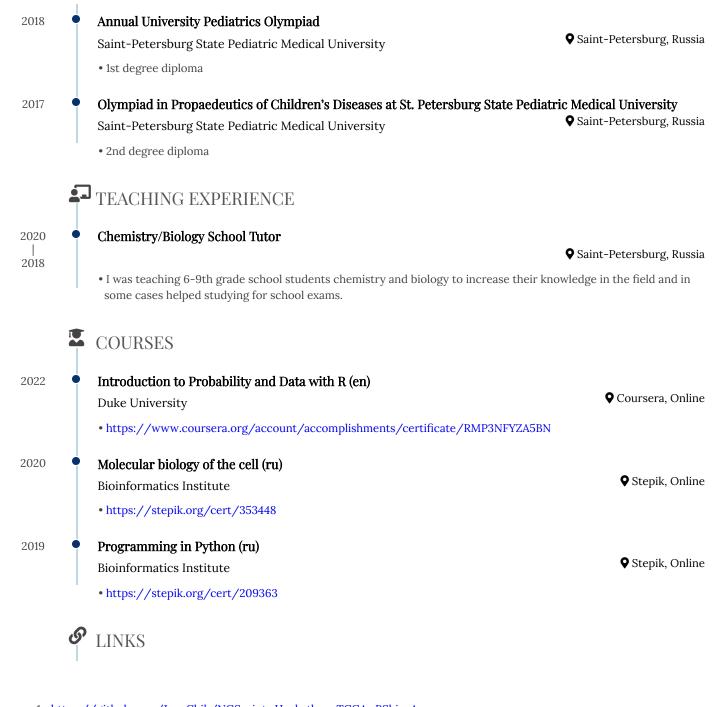
- Project: Data Visualization in Bioinformatics
- Result: ShinyApp1
- Certificate by the link²

2021

Bioinformatics Contest 2021

Stepik, Online

• Participant³



- $1. \verb| https://github.com/JaneChik/NGSprint_Hackathon-TCGA_RShinyApp|$
- 2. https://drive.google.com/file/d/1PS_joxoZYsNmJzZyqR5xkMqH9ZiE5UrO/view?usp=sharing
- $3. \verb| https://drive.google.com/file/d/1SEgIqYqY7m2tne_XPy9rAscXteFH957N/view?usp=sharing| \\$