

# 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: RNA-seq, 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 RNA-seq 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 previously 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

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🐙 [github.com/JaneChik](https://github.com/JaneChik)

in [evgenia\\_chikina](#)

## SKILLS

R

Python

Bash

## LANGUAGES

Russian

English

German

Made with the R package [pagedown](#).

The source code is available on [github.com/nstrayer/cv](https://github.com/nstrayer/cv). Modified source code for this CV is available [here](#)

Last updated on 2022-06-14.

- 2020
- **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](#) 📍 Discord, online
    - Project: Data Visualization in Bioinformatics
    - Result: ShinyApp<sup>1</sup>
    - Certificate by the link<sup>2</sup>
  - **Bioinformatics Contest 2021** 📍 Stepik, Online
    - Participant<sup>3</sup>

- 2018 • **Annual University Pediatrics Olympiad**  
Saint-Petersburg State Pediatric Medical University 📍 Saint-Petersburg, Russia  
• 1st degree diploma
- 2017 • **Olympiad in Propaedeutics of Children's Diseases at St. Petersburg State Pediatric Medical University**  
Saint-Petersburg State Pediatric Medical University 📍 Saint-Petersburg, Russia  
• 2nd degree diploma



## TEACHING EXPERIENCE

- 2020 | 2018 • **Chemistry/Biology School Tutor**  
📍 Saint-Petersburg, Russia  
• I was teaching 6-9th grade school students chemistry and biology to increase their knowledge in the field and in some cases helped studying for school exams.



## COURSES

- 2022 • **Introduction to Probability and Data with R (en)**  
Duke University 📍 Coursera, Online  
• <https://www.coursera.org/account/accomplishments/certificate/RMP3NFYZA5BN>
- 2020 • **Molecular biology of the cell (ru)**  
Bioinformatics Institute 📍 Stepik, Online  
• <https://stepik.org/cert/353448>
- 2019 • **Programming in Python (ru)**  
Bioinformatics Institute 📍 Stepik, Online  
• <https://stepik.org/cert/209363>



## LINKS

1. [https://github.com/JaneChik/NGSprint\\_Hackathon-TCGA\\_RShinyApp](https://github.com/JaneChik/NGSprint_Hackathon-TCGA_RShinyApp)
2. [https://drive.google.com/file/d/1PS\\_joxoZYsNmJzZyqR5xkMqH9ZiE5UrO/view?usp=sharing](https://drive.google.com/file/d/1PS_joxoZYsNmJzZyqR5xkMqH9ZiE5UrO/view?usp=sharing)
3. [https://drive.google.com/file/d/1SEgIqYqY7m2tne\\_XPy9rAscXteFH957N/view?usp=sharing](https://drive.google.com/file/d/1SEgIqYqY7m2tne_XPy9rAscXteFH957N/view?usp=sharing)