

Alice Saparov

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EDUCATION

Harvard Medical School, Boston, MA

December 2023

MS Biomedical Informatics

GPA: 4.00

University of Chicago, Chicago, IL

June 2022

B.A. Biology | *Specialization in Quantitative Biology*

Data Science Minor

GPA: 3.74

AWARDS AND HONORS

Nominated for BSCD Iguana Excellence in Teaching Award 2021

College Swimming & Diving Coaches Association of America Scholar All-American 2018-20

College Swimming & Diving Coaches Association of America All-American 2018-20

University Athletic Association All-Academic Team 2018-21

Dean's List 2018-19

SKILLS

Python ◦ RStudio ◦ SQL ◦ Git ◦ Linux ◦ Machine Learning ◦ Text Mining ◦ Big Data
Genomic Data Analysis ◦ High Performance Computing ◦ Bioconductor ◦ SAS ◦ Admiral

RELEVANT COURSEWORK

Single Cell Analysis ◦ Data Engineering ◦ Deep Learning ◦ Statistics ◦ Linear Algebra

Genomic Data Manipulation ◦ Data Ethics ◦ Machine Learning ◦ Data Visualization

Mathematical Methods for Biological Sciences ◦ Bioinformatics ◦ Statistics ◦ Data Science

RESEARCH EXPERIENCE

VERTEX PHARMACEUTICALS

Statistical Programming Intern | Biometrics

May 2023 - August 2023

- Independently created an automated program for cross-checking cSDRG documents with relevant SDTM and Metadata datasets in R
- Leveraged Admiral in parallel with Tidyverse packages in R to produce (comparable to SAS) ADaM datasets following CDISC guidelines for Phase 3/4 Clinical Trials
- Generated functions and documentation for automated programs in R for the creation of new ADaM datasets, and evaluated the performance of Admiral for the given tasks

QUEST DIAGNOSTICS

Data Science Intern | Healthcare Analytics Solutions

August 2022 - April 2023

- Independently performed background research and contributed to writing research papers
- Cleaned millions of rows of unstructured Quest lab data in a way that was medically verifiable
- Analyzed Quest lab data using SAS producing quantifiable results and interpretable statistics

RED HAT

AIOps Data Scientist Software Engineer Intern

Summer 2021

- Engineered an additional feature for a pre-existing Jupyter Notebook
- Updated the content and organization of the Data Science Workflow repository
- Tracked progress using git and improving upon my knowledge of version control
- Created documentation on best practices for data science visualizations

UNIVERSITY OF CHICAGO

Research Assistant at Machine Learning Lab

Summer 2020

- Utilized Python and Jupyter Notebooks for data analysis projects
- Constructed a Jupyterbook online machine learning resource for academic reference
- Consolidated and presented lab project information on github lab wiki

STANFORD MEDICINE

Research Assistant at Nicolls Lab

Summer 2019

- Performed lab procedures; prepared and stained rat lung tissue for histological analysis, maintained mouse colony, ran PCR and qPCR
- Tracked changes in mouse tail volume over time in a mouse tail lymphedema model, utilized Photoshop and Excel to calculate the tail volume

TEACHING EXPERIENCE

UNIVERSITY OF CHICAGO BIOSCIENCES

Undergraduate Teaching Assistant

March 2021 – June 2022

- Responsible for instructing and providing feedback to 20 student lab section in their completion of weekly R and Python coding assignments
- Worked closely with the professor to track student progress in the introductory Quantitative Modeling in Biology course (Spring 2021, Spring 2022) and upper level Mathematical Methods for Biological Sciences course (Fall 2022)

JUNI LEARNING

Math Instructor

September 2020 – February 2022

- Instructed students in Pre-Algebra, Algebra, and Geometry courses
- Assigned and reviewed weekly homework assignments
- Instilled confidence in student's mathematical abilities

CAMPUS LEADERSHIP AND ENGAGEMENT

Varsity Swimming and Diving

Diver, Team Captain

September 2018 – June 2022

- Balanced full course load with 20-hour weekly commitment to diving
- Elected Diving Team Captain for the 2021-2022 academic year

REFERENCES

Todd Case, Senior Director - Senior Director, Biometrics, Vertex Pharmaceuticals

Todd_Case@vrtx.com

Dmitry Kondrashov, Instructional Professor of Biology, University of Chicago

dkon@uchicago.edu (773) 834-3387

Raul Castro Fernandez, Assistant Professor of Computer Science, University of Chicago

raulcf@uchicago.edu (773) 702-2343