Arianna Aalami Berlin, Germany

Contact information:

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Personal Information:

Date of Birth: 29 November 2002 Nationality: German, American

EDUCATION:

9/21-6/25 **Stanford University**, Stanford, CA. B.Sc. Bioengineering, Minor in German Studies.

Cum GPA: 3.7/4.0.

9/17-6/21 **Kent Denver Highschool**, Denver, CO. Senior Cum Laude Society.

EXPERIENCE:

7/25-9/25 Intern, Burns Life Sciences Consulting GmBH, Berlin, Germany

Conducted independent research project and wrote a report the use of large language models (LLM) in bioinformatics pipelines. Coded a package in R to help bioinformaticians get more out of their data by making API calls to a LLM in order to deduce biological interpretations of principal component analysis loadings. Gained exposure to CyTOF, single-cell RNA sequencing, spatial, and proteomic data, and working alongside startups to learn about different workflows in bioinformatics and multi-modal data integration.

7/24-9/24 Intern, Cellphenomics GmBH, Berlin, Germany

Assisted PhD student mentor establish a co-culture model of T Cells and patient-derived 3D organoids. Worked with human cell culture and maintained multiple lines of organoids and mastered passaging, freezing, and thawing techniques. Independently completed and recorded multi-day experimental protocols, collected and analyzed data using ImageJ. Completed protocols like PCR and T Cell isolation. Responsible for restocking laboratory supplies and cleaning equipment. Learned about tumor heterogeneity, colorectal cancer genotype classification, immune cells in the tumor microenvironment, and targeted immunotherapies. Internship culminated with a formal lab meeting presentation.

6/23-12/23 Intern, Ohler Computational Genomics Lab, Max-Delbrück Centrum, Berlin, Germany Assisted PhD student mentor with the evaluation and maintenance of her variational auto

encoding deep learning model and assigned personal project. Worked in python and bash on Jupyter notebooks and high-performance computing clusters respectively and gained familiarity with GitHub. Learned about single-cell multiomics, such as gene expression and chromatin accessibility data, the architecture of neural networks, and different methods of

data integration.

1/23-3/23 **Teacher,** Hatch Learning, Palo Alto, CA.

Taught computational thought to two classes of Kindergarten through second grade age children. Studied and memorized curriculum, organized lesson plans and materials, mitigated conflicts between classmates, used teamwork skills with co-teachers (4 hrs/wk).

6/22-9/22 Intern, Brown Immunology Lab, Icahn School of Medicine at Mount Sinai, New York, NY

Assisted postdoc mentor with research and experiments on the creation of targeted vaccines using lipid nanoparticles and bi-directional antibodies. Learned to independently perform protocols such as DNA extraction, purification, amplification, and quantification, bacterial transformations, cell splitting, gel electrophoresis, and mRNA synthesis. Gained experience using Benchling to create plasmids, simulate digestions/ligations, and design primers. Observed and learned about the planning and execution of *in vivo* and *in vitro*

experiments.

AWARDS/ FELLOWSHIPS:

CareerEd Fellows Internship Stipend, Palo Alto, CA, 5/23.

ADDITIONAL INFORMATION:

- Intermediate/Advanced knowledge of German (10+ years of experience).
- Beginner/Intermediate knowledge of Mandarin.
- Proficient in R and Python, familiarity with C++ and bash.
- Some hobbies include classical flute playing, baking, and watching old films.