

Ayal Yakobe

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EDUCATION

Columbia University - New York City, USA

January 2024 – Present

Master of Science, Computer Science

- 4.0 / 4.0 GPA
- Pursuing a part-time MS and exploring cutting-edge techniques in the fields of machine learning and AI, with a particular interest in applications such as natural language processing and computer vision.

Columbia University - New York City, USA

August 2021 – May 2024

Bachelor of Arts, Computer Science and Philosophy

- 3.76 / 4.0 GPA (Dean's List)
- Expected graduation: May 2024
- Team member competing on the JP Morgan AI Center's semi-annual competition, fostering an environment for advancements in the field of financial engineering as it pertains to machine learning
- Conducting research and writing a two-semester thesis on protein structure differentiation using machine learning and computer vision techniques – under the supervision of Professor Mohammed AlQuraishi.

EXPERIENCE

Teal Omics - New York City, USA

February 2024 - Present

Machine Learning/ AI Research Engineer (Intern)

- Spearhead research initiatives leveraging machine learning to analyze and “clean” complex biological data sets.
- Collaborate with cross-functional teams to integrate advanced proteomics techniques into our research.
- Play a pivotal role in the exploration of novel methodologies to enhance the understanding and treatment of age-related ailments.

Columbia University School of Biological Sciences - New York City, USA

December 2022 - Present

Laboratory Assistant

- Assist in surveying various biological components of microorganisms to better understand electrical currents
- Aim to find a connection between the electric apparatuses within organisms and human decision making
- Working on creating a model using a sequence of machine learning and computer vision models and software's respectively to identify the center of various types of cells. Automating this process saves the lab time and resources and penetrates further to the crux of the lab's overall research.
- Using Pyvista, I create intricate geometries, apply advanced rendering techniques, and incorporate interactive controls, resulting in visually compelling and easily navigable models.

Columbia University Department of Biomedical Informatics - New York City, USA

July 2022 – October 2023

Software Developer

- Worked alongside a team of developers to create a natural language interface that combines several facets of computer science to extract information from a versatile pipeline and match medical professionals to potential test trial subjects
- Conducted research as to the latest tools in innovative cancer detection technologies and provide solutions on seamlessly integrating these technologies into our spaces
- Cooperated and coordinated research efforts with other universities to facilitate an intellectual dialogue on technologies and methods optimal for gathering cancer “catchment area” data
- Familiar with Git and Unix commands to aggregate personal assignments to the team's overall project

MILITARY SERVICE

Israeli Defense Forces - Paratrooper Brigade

November 2017 – July 2020

Sergeant First Class (SFC)

- Sharpshooter deployed to multiple international borders and participated in numerous operations to resolve security threats in those regions
- Active reservist, participating in bi-annual military exercises and am fully operational; ready to mobilize in case of a severe external threat

ADDITIONAL INFORMATION

- Code: C#, C, Java, SQL, JavaScript, TypeScript, CSS, HTML, Python, Azure, Node.js, Angular, React, ASP.NET
- Languages: native English, fluent Hebrew, conversational French
- Achievements: Honor Society of the Columbia School of General Studies, Best soldier award upon conclusion of infantry training, Honorable citation from the Chief Infantry and Paratrooper Officer at the conclusion of my service