# STEVEN RUD

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**J** 617 – 833 – 5690

Website Portfolio

in LinkedIr

G GitHub

#### TECHNICAL SKILLS

**Languages:** Python, Java, JavaScript, HTML/CSS, SQL

Frameworks: Node.js, React,

Flask, JUnit

Developer tools: Git,

MongoDB, VS Code, PyCharm, Eclipse, JupyterLab, Microsoft Programs

**Libraries:** Pandas, NumPy, Matplotlib, PyTorch, Scikitlearn, Seaborn, Plotly, Beautiful Soup, Scipy, Keras

#### SOFT SKILLS

**Problem Solving** 

Analytical Skills

Communication

Teamwork

**Quick Learner** 

Adaptable

Creative Thinking

#### FOREIGN LANGUAGES

Russian – Native Proficiency, fluent in reading and writing.

Hebrew - Intermediate proficiency

## **EDUCATION**

# **Brandeis University**

# **B.S. - Computer Science**

🖮 August 2020 – December 2023 💎 Waltham, MA

I've always admired Mathematics and the Sciences, with a particular focus on Biology, for their intrigue, purity, and application in the world. I have culminated my interest in these two fields into the study of Computer Science. So, at Brandeis I have undergone a heavy workload in Computer Science, studying Algorithms, Data Structures, Machine Learning, Natural Language Processing, Operating Systems, Data Science, and general software engineering techniques. I have as well done a lot of work in Biology, studying Genetic and Genomics, Honors General Chemistry, and General Biology Lab.

#### **Some Relevant Coursework**

- **Fundamentals of Software engineering:** Learned the construction of large bodies of software using modern software engineering practices.
- **Fundamentals of Natural Language Processing:** Studied the natural language understanding and the theory and practice of current computational linguistic systems.
- **Fundamentals of Artificial Intelligence:** An Introduction to Lisp and heuristic programming techniques through planning natural language processing and computer vision.
- Data Structures and the Fundamentals of Computing: Focused on the design of algorithms and the most widely used data structures employed in solving commonly encountered problems.

# **PROJECTS** (more on Website Portfolio)

#### **Species Genome Analysis and Animal Group Predictor**

### Genome Analysis Repository

This project conducts species genome analysis using machine learning,
Bioinformatics, and Data Science techniques. It parses genomic sequences into
K-mers, analyzes codon frequencies, and trains a model to classify species and
predict animal groups. Visualizations like heatmaps and classification reports
support the analysis. The model successfully identifies the species of two
mystery genomes, showcasing its capability with unknown data.

#### **LEGO Set Finder Website**

LEGO Website Repository

**2** LEGO Website

• This website, developed using JavaScript and MongoDB for data storage, serves the purpose of assisting users in locating LEGO sets. It offers a range of filters to facilitate searching and allows users to keep track of sets they want and those they already own.

# Letterboxd Top 4 Movie Generator & Yearly Movie Data Analysis

# Movies Repository

• This Full-Stack project was created with a Python backend and a React.js frontend with Flask and Dash libraries to create a web application that provides users with a personalized top 4 selection of their top-rated movies on Letterboxd, along with a data analysis feature showcasing the top 4 movies and the average ratings over the years.

# **EXPERIENCE**

#### ASDAN VOLUNTEERING/PEER MENTORING

Tabeetha School, Tel Aviv Jaffa, Israel

Volunteered for 150 hours throughout 2 school years (2018 – 2020). Assisted 8th and 11th grade students one-on-one and in small groups helping them improve their math skills. Reinforced classwork presented by the teacher, helped with homework, and prepared students for tests.