# Mahi Pasarkar

Website: <a href="https://www.mahipasarkar.com/">https://www.mahipasarkar.com/</a> | E-mail: <a href="mailto:pasarkarmahi@gmail.com">pasarkarmahi@gmail.com</a> | https://github.com/mahi-pasarkar/ | https://rainyelephant.itch.io/

#### **Education**

**Rensselaer Polytechnic Institute** | Troy, NY

Aug 2020 - May 2024

Bachelor of Science in Computer Science (AI and Data Concentration) and Games and Simulations

GPA: 3.67

Achieved Dean's Honors List 2020, 2021, 2022 and 2023

### Research

- Using Natural Langauge Processing methods to take in unstructured disease reports for vector-borne and water-borne diseases including Dengue, Zika, Chikungunya, and Malaria, and produce a structured database that can be used to answer a broad range of crucial research questions.
- Coordinating with other research group studying disease dynamics and predicting outbreak locations by supplying them with data produced by our model.

### **Experience**

Submitty | Troy, NY Jan 2023 - Aug 2023

Full Stack Developer

- Using PHP, Javascript, Twig, Python, HTML, CSS, Python, and PostgreSQL to develop a website that manages courses for computer science departments of several schools.
- Developing major site features such as pronouns in user profiles, calendar overhauls such as filtering, coloring, and fixing assignment setting bugs.
- Improved security for Notebook zip downloads.

Sanofi | Bridgewater, NJ, Hybrid

Jun 2022 - Present

Intern in Global Regulatory CMC

- Working with the regulatory department on Accumulus Synergy and FHIR standard using XML and Postman in order to test the Accumulus platform and help bring healthcare data to a unified cloud.
- Supporting product life cycle management by creating documents such as GRCSD and Product Overviews based on regulatory information from various documents using Veeva Vault, Word, and Sharepoint.
- Performing queries and remediating data in Veeva Vault RIM to assist in data integrity.

## **Projects**

### **Machine Learning Projects**

- Implemented supervised learning methods such as linear model with legendre feature transforms, linear regression, k nearest neighbors, radial basis functions, neural networks, and support vector machines.
- Managed overfitting with lambdas and constraints. Used cross-validation to avoid data snooping.
- Implemented reinforcement learning method Q learning to train in-game agents using C# and Unity. Created browser demo with live training: <a href="https://github.com/mahi-pas/Q-Learning-vs-PPO-Machine-Learning">https://github.com/mahi-pas/Q-Learning-vs-PPO-Machine-Learning</a>

### **Skills**

Languages: C++, C#, C, Python, Java, HTML5, CSS, Javascript, PHP, Twig, PostgreSQL, JSON

Tools: Unity, Godot, Unreal, Veeva Vault RIM, Microsoft Office, Git, Perforce, Numpy, Pandas, Matplotlib

Concepts: Machine Learning methods, Linear Algebra, Scrum, Game Design

### **Activities**

- Google Developer Student Club Lead
- Member of Computer Science Honor Society Upsilon Pi Epsilon
- Member of Service Fraternity Alpha Phi Omega