

# Mahi Pasarkar

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## 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

**Natural Language Processing for Structuring Disease Data** | Rensselaer Polytechnic Institute Jan 2024 - Present

- Using Natural Language 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

**Submittity** | 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 GRCS 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: <https://github.com/mahi-pas/Q-Learning-vs-PPO-Machine-Learning>

## Skills

**Languages:** C++, C#, C, Python, Java, SQL, HTML5, CSS, Javascript, PHP, Twig, 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