



Parsh Verma

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EDUCATION

Pomperaug High School, Southbury, CT | Senior

GPA | 4.255 (Unweighted) / 7.636 (Weighted)

Certifications | HarvardX Tiny ML, CS50 Web Programming, GIAC Foundational Cybersecurity Technologies

Core Classes | AP Chem, AP Bio, AP Calculus AB & BC, AP Physics 1 & C, Neuroscience, Investing in the Stock Market

SKILLS

Technical Skills | R, Python, TensorFlow, Django, Java, HTML, CSS, JavaScript, MySQL, SQLite, GitHub

Soft Skills | Quick Learner, Good Listener, Critical Thinker, Proficient Problem Solver, Good Communicator

Languages | Bilingual Proficiency - English & Hindi | Actively Acquiring - Spanish

RESEARCH EXPERIENCE

AI-Based Off-Target Prediction Methods for CRISPR-Cas9 Gene Editing Published in peer-reviewed Journal

Mentor | Dr. Rajagopal Appavu PhD | Health Care Studies Professor at the University of South Florida

- Analyzed and Evaluated various neural network models to enhance CRISPR's on-target efficiency.

Hybrid Neural Networks for Off-Target Prediction in Gene Editing

Under Peer Review

Mentor | Dallin Lowder | Ph.D. Candidate at Baylor College of Medicine

- Developed AI models using DNA sequences, biophysical properties, and CG content to predict off-target effects in CRISPR-Cas9 gene editing, improving precision and safety in human cell lines.

PROJECTS

IdeaNests (ideanests.com)

Launched - October 2023

- Developed 'IdeaNests,' an AI-driven web platform using Python, Django, and NLP, to empower community decision-making by analyzing and summarizing local ideas for actionable insights. Launched successfully in two towns, fostering inclusive engagement and innovation.

DeepTumorDetect: Enhancing Brain MRI Analysis using ResNet50 and U-Net Models

September 2024

- Implemented a ResNet50 classifier to detect tumors in MRI images and a U-Net model for precise tumor localization in brain scans, enhancing diagnostic accuracy.

News Headline-Based Sentiment Analysis for Stock Market Prediction

July 2022

- Utilized NLP and ML models (Logistic Regression, Random Forest) for stock prediction based on news headlines.

EXPERIENCE

Applied AI Consulting - Intern

May 2024 - Present

- Design and develop an agentic AI system for automating QA tasks. Enabling seamless communication between AI agents, specialized in different domains, for improved efficiency and accuracy.

Brookfield Learning Center - Web Consultant

April 2024 - Present

- Develop and implement digital business strategies for Brookfield Learning Center, including site optimization, content updates, and user interface improvements, to enhance user experience and drive business growth.

TeensTutorsTeens - CT Chapter President

March 2021 - Present

- Expanded outreach and established educational partnerships for Teens Tutors Teens, a 501(c)(3) nonprofit, enhancing tutoring services and support for students' academic growth.

AWARDS/RECOGNITIONS

Cyber Start Scholar with Honors: Top 2% Nationwide(2023, 2024), Destination Imagination: Service Learning Challenge - 1st Place States - Nationals Qualifier, Qualified for the Tennis Conference Singles Final(2022, 2023), Secured the Grip Tape Award - garnering \$500 for innovative project proposal, Debate State Qualifier (Connecticut Debate Association), Rafa Nadal Tennis Academy Values Award winner, Scholar Leader Award - Academic Excellence and Leadership(2020)