Prathamesh Devadiga

Professional Summary

Innovative Computer Science Student & Entrepreneur with a passion for leveraging technology to drive social change. Skilled in Machine Learning, Data Science, Web Development (Frontend), and Finance. Excels in decoding financial markets using advanced ML algorithms. Co-Founder of "The Bookshelf," simplifying peer-to-peer book lending, and President at "Catalysis," empowering young minds through education. Eager to collaborate on impactful projects and contribute to innovative solutions.

Contact Information

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Experience

Research Intern, IIT Indore

Dec 2023 - Present As a

Research Intern at IIT Indore, I am currently specializing in the intersection of cybersecurity and Deep Learning, specifically focusing on developing techniques for malware detection. I leverage Deep Learning methodologies to advance innovative approaches in identifying and addressing evolving malware threats.

Co-Founder & President, Catalysis Bangalore

Jul 2023 - Present

Leading operations, budget management, and strategic planning for a non-profit empowering young minds through mentorship and education.

Mentor, HackerSpace

Oct 2023 - Present

Involved in mentoring and conducting workshops, contributing to the development-oriented community. Member, Google Developer Student Clubs PES University ECC Aug 2023 - Present Managed event finances, collaborated with organizers, and enhanced participant experience, offering a cost-free event.

Co-Founder and Web Developer, The BookShelf

May 2023 - Present

Developed a transformative platform connecting students for seamless peer-to-peer book lending and selling, fostering knowledge sharing.

I single-handedly designed, developed, and managed my startup's website, meticulously ensuring accurate content representation and optimizing user experience for enhanced engagement.

Research Intern, MedInn TechLab

Apr 2023 - Present

Conducted research on bioinformatics and medical devices. Currently developing an LLM for integration into the Medical Industry.

Webmaster, IEEE RAS PESU EC CAMPUS

Jun 2023 - Sep 2023

Proficiently designed, developed, and managed the club's website, ensuring precise event representation and optimizing user experience for enhanced engagement.

Social Summer of Code - Open Source Developer, Hack2skill May 2023 - Jul 2023 Contributed to open-source projects, gaining valuable experience in collaborative software development.

Education

Bachelor of Technology - BTech, Computer Science

PES University Oct 2022 - May 2026

CGPA: 9.41

Recipient of CNR Rao Scholarship (Top 5% of students)

Grade 12

Madhava Kripa School Jun 2021 - May 2022

Grade: 94.8

Among top 10 in the batch. Part of Chess Team, Scouts, School Council.

Grade 10

Madhava Kripa School June 2019 - March 2020

Grade: 90.8

Among top 10 in the batch. Part of Chess Team, Scouts, School Council.

Skills

Programming Languages: Python, JavaScript, HTML, CSS, C, Java

Technologies Used: TensorFlow, PyTorch, GPT Models (Transformers), MERN Stack (MongoDB, Express.js, React.js, Node.js), MLOps

Skills Demonstrated: Machine Learning, Deep Learning, Full-Stack Web Development, Natural Language Processing (NLP), Software Development Life Cycle (SDLC), Version Control (Git), Cloud Computing (AWS, Azure), Data Visualization (Matplotlib, Seaborn, Tableau), Problem-solving, Team Collaboration, Critical Thinking, Research and Analysis.

Projects & Achievements

Winners of Arithemania 2.0 Hackathon, Shunya PES University

Apr 2023

Secured first place in "robotics and automation" domain, demonstrating innovative problem-solving skills.

Winners of Cisco Thing Q
bator Hackathon 6.0 , Cisco

Nov 2023

My team was among the winners, demonstrating innovative problem-solving skills.

Winners of "SHE-Summit" Ideathon, The Entrepreneurship Club of PES University $Mar\ 2023$

Championed the ideathon competition on "Women Empowerment," showcasing dedication to social causes.

Top 10 in "Safe-A-Thon" Hackathon, MahilAI PESU

Apr 2023

Ranked among top 10 teams in a hackathon focusing on "Women's Safety," contributing to community welfare.

Potato Plant Disease Classifier

Apr 2023

Developed a deep learning model utilizing CNN algorithm to classify potato plant diseases via leaf analysis, aiming to assist in accurate disease identification for agricultural purposes.

GPT Implementation

Sept 2023

Employed a pre-trained GPT model to generate cohesive text based on user prompts, fostering real-time, context-aware interactions and continuous user engagement through an uninterrupted loop of prompt-based text completions.

Neural Network for Synthetic Spiral Data Classification

Oct 2023

This project demonstrates the training and evaluation of a neural network for classifying synthetic spiral data into multiple classes. It includes code for data generation, model architecture, training, hyperparameter tuning, evaluation, and visualization EVERYTHING FROM SCRATCH using numpy.

Freelancing Website for College Students (MERN Stack)

October 2023

This project showcases the development of a freelancing website tailored specifically for college students, implemented using the MERN (MongoDB, Express.js, React.js, Node.js) stack. It encompasses various web technologies to create a platform where students can offer and find freelance opportunities, fostering a collaborative environment within the college community.

Mental Health Chatbot July 2022

This project introduces Klaybot, a specialized chatbot offering empathetic mental health support. Powered by advanced AI technology, Klaybot provides guidance, resources, and a safe space for individuals facing mental health challenges. It emphasizes user confidentiality and offers accurate information and coping strategies. Through AI and natural language processing, Klaybot fosters open dialogue, aiming to promote mental wellness among users.

News Classifier December 2023

I developed a news classifier achieving an accuracy of 96.7. Leveraging various tools from the Scikitlearn library, including confusion matrix analysis, cross-validation scoring, and accuracy metrics, I utilized powerful models like MLPClassifier and SGDClassifier, along with TfidfVectorizer for text feature extraction, to achieve high precision in classifying news articles

RISC-V CPU Implementation with Path Planning Algorithm

November 2023
Implemented a RISC-V CPU using Verilog tailored to execute a path planning algorithm. Engineered the CPU to extract start and end points, perform intricate computations for path planning, and store resultant node points connecting the start and end points within the data memory

Open Source Stock Market Analysis Software

In Progress

Leading the development of an open-source stock market analysis tool, hoping to impact 10,000+ users with actionable financial insights.

Publications, Books Authored & Talks Given

Workshop on MONAI: Medical Open Network for AI

Upcoming on Jan 2024

Will be co-conducting a workshop on MONAI alongside a senior, addressing a gathering of approximately 200 students. Provided insights into leveraging the Medical Open Network for AI (MONAI) and its applications in healthcare and medical imaging.

Presented a session on Building a Neural Network from Scratch with Synthetic Spiral Data Nov~2023

Delivered a talk to an audience of approximately 100 students covering the theory of neural networks and demonstrating the process of building a neural network from scratch using synthetic spiral data.

Research Paper: Radiation Pollution in Bangalore

In Progress

Investigating radiation pollution and its impact on living creatures. Developing solutions to reduce pollution levels by 30%.

Medical Knowledge Extraction and Summarization using LLMs

In Progress
Building a large language model from scratch. This project aims to extract and summarize crucial information from voluminous medical records, research papers, and clinical notes, enhancing accessibility and understanding for healthcare providers and researchers.

Book: Exploring Intelligent Systems: A Holistic Guide to Advanced AI In Progress An inclusive guide unraveling Python programming, diverse machine learning algorithms, and cutting-edge AI trends. Fused with humor and insightful memes, this book aims to provide a comprehensive understanding of AI's landscape, encompassing ethical considerations, emerging technologies like GANs and federated learning, and bridging theory with practical implementation. Currently in progress.

Certifications

Machine Learning Specialization - Stanford University, Coursera Deep Learning Specialization - Stanford University, Coursera Financial Analyst Certification - Udemy Financial Markets - Yale University

CS50 - Harvard University

Introduction to Management Consulting - Emory University - Goizueta Business School Startup School - Y Combinator

JPMorgan Software Engineering Virtual Experience - JPMorgan Chase & Co.