Paramveer Singh Bhele

EDUCATION

University of South Florida

August 2022 - May 2026

Bachelor of Science in Computer Science

Tampa, FL

Scholarships: USF Green and Gold Directors Award, Annette L. Raymund Endowed Scholarship Fund

Courses: Data Structures & Algorithms, Automata Theory, Software Engineering, Advanced OOP in C++, Secure Coding

EXPERIENCE

Undergraduate Research Assistant

February 2025 - Present

RARE Lab, University of South Florida — Supervisor: Dr. Zhao Han

Tampa, FL

- Designed and deployed survey tools to analyze human-robot interaction studies, capturing key behavioral insights
- Utilized Pandas and NumPy to assess the datasets generated, and improve interaction models by 20%
- Collaborated on AI/ML projects for multiple robots, training models and implementing intelligent control

Student Assistant - Collections and Discovery

August 2024 – Present

University of South Florida Libraries

Tampa, FL

- Indexed 10,000+ images in Excel, enriching metadata to cut classification errors by 25% and boost catalog recall
- Improved cataloging accuracy by standardizing metadata, resulting in efficient retrieval for 1,000+ items

Peer Mentor For Learning Teams

April 2023 – August 2024

University of South Florida College of Engineering — Supervisor: Dr. Mary E. Goodwin

Tampa, FL

- Strengthened Calculus mastery for 25+ engineering students via tailored classes and problem-solving drills
- Secured 100% engagement in EGN 4930 by orchestrating interactive peer-learning sessions weekly

App Developer Intern

May 2022 – July 2022

Coefficient Software Systems Pvt Ltd.

Mumbai, India

- Profiled 500+ US, UK, and Australian universities, producing benchmarking dashboards for product positioning
- Improved UI/UX for Learn English app, maintaining 100,000+ downloads and a 4.4/5 on the Google Play Store

PROJECTS

CarbonCTRL (Hackathon Winner) | Full Stack, TensorFlow, Node.js, Next.js, React, Supabase, Gemini AI | carbonctrl.us

- Built an end-to-end platform that quantifies emissions and surfaces AI-driven cut/offset plans in real time
- Integrated React/Next.js front-end with Gemini AI, for dynamic dashboards, authentication, and personalized insights
- Ranked 1st of 70+ projects at HackaBull 2025 for Best Use of Gemini API Track

Fraud Detection Dashboard | Numpy, Scikit-learn, Machine Learning, Models, Flask, Logistic Regression, Dash

- Achieved 89 % accuracy on card-fraud data with Logistic Regression, lifting performance 15 % via scaling
- Reduced false-positive alerts by 12% through class-weight tuning and threshold calibration
- Delivered Flask/Dash app that plots **ROC**, confusion, heatmaps, speeding analyst review cycles by 2 times

Stock Analysis Tool | C#, WinForms, .NET, Charting, Algorithmic Validation, LINQ, OOP

- Built dynamic stock analysis UI to detect price waves and draw live Fibonacci levels with real-time confirmations
- Enabled wave simulation via drag, animation, and control buttons, with instant validation and feedback
- Validated 1,000+ candles using peak/valley detection, Fibonacci math, and visual confirmation markers

Leadership

Head of Logistics | TEDx at USF

June 2024 - January 2025

• Planned TEDx event logistics, aligning 10+ volunteers with a 100 seats venue and finalizing operations and run sheets Vice President | Students of India Association at USF January 2024 - May 2024

• Elevated the budget by \$15,000 through targeted fundraising, steering a 26-member team toward expanded programs Database Director | Society of Hispanic Professional Engineers at USF

January 2024 - May 2024

• Streamlined 1,500+ files archive, cutting retrieval time by 40% via categorization and training officers

TECHNICAL SKILLS

Languages: Python, C++, C, C#, Java, TypeScript, JavaScript, SQL

Frameworks: React.js, Next.js, Node.js, Express, .NET, Flask, Supabase, Gemini API, OpenAI API, REST APIs

Developer Tools: AWS, Docker, GitHub, VS Code, Jupyter, Jira, MySQL, Excel, Android Studio, Xcode Microsoft 365

Machine Learning: NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch, OpenCV, Matplotlib, DeepFace