# **Pritham Devaprasad**

## Summary

Software Developer specializing in IoT, Cloud Integration, and Algorithm Design Experienced in React, AWS, Python, Java, C#, and C. Proficient in developing scalable, efficient software solutions for complex challenges in IoT, healthcare applications, and algorithm design. Skilled in cloud integration, unit testing, and developing applications that bridge devices and cloud platforms. Demonstrated expertise through participation in industry challenges, focused on solving real-world issues. Passionate about continuous learning, committed to creating innovative technology solutions that drive positive change.

## **Projects**

SIH 2024 - Smart India Hackathon (SIH) Finalists

- Secured First Place in the VITISH 2024 Hackathon, a qualifier for the Smart India Hackathon (SIH) 2024, ranking among the top 50 teams selected from an initial 548 participants.
- Addressed the problem statement: "Online Real-Time Survey and Monitoring of Water Bodies in Delhi", provided by the Government of NCT of Delhi (IT Department, GNCTD).
- Developed a smart buoy system leveraging fog computing to process data locally and a live dashboard for monitoring water quality metrics, generating reports, and providing actionable suggestions for rejuvenating water bodies.

Defy'25 Hackathon

- Secured 3rd Place in the DeFi Track at the prestigious Defy'25 Hackathon as part of Team InvestIQ.
- Developed "Chain of Bulls", a decentralized platform that democratizes access to algorithmic trading by bridging the gap between retail traders and professional-grade trading algorithms.
- The platform empowers independent economists to monetize their expertise while enabling traders to access affordable, dynamic, and adaptable investment strategies.
- Leveraged Web3 technology to ensure secure, transparent, and decentralized operations, fostering financial innovation and informed investment decisions for users.

Microsoft Imagine Cup 2024

- TerraIntel, an AI solution for precision agriculture analyzing plant bioelectrical signals.
- Technologies: Bio Amp ExG Pill, Arduino, BrainBay, React, Python, Azure Machine Learning.

WeMace Application

• Developed WeMace, a cross-platform app for Self Help Groups (SHGs) to promote collaboration, resource sharing, and positive change among members, fostering community organization and support.

Sentiment Analysis Application

• Developed a sentiment analysis application combining VADER and RoBERTa models, using Twitter review data.

Tamil-English-Tamil Speech Translator

• Created a speech translation application using Azure Speech Services.

Augmented Reality Project Using Unity and Vuforia

- Developed an AR application using socket programming, Unity, and Vuforia.
- The application captured an image of a book, processed voice commands using PyAudio, and sent messages to Unity.
- The client in Unity received the message and moved a 3D model of a spaceship, tracking the book's image.

Panimalar Engineering College Hackathon

- Developed a blockchain-based system for pre-leased real estate investments using NFT tokens.
- Tools: Hardhat Ethereum, Smart Contracts, React, Metamask.

K! Hacks, CEG Tech Forum, Anna University

- Developed a blockchain platform for rental agreements and property management using NFTs and smart contracts.
- Features: Ownership recording, rental agreement automation, fractional ownership, and smart contract automation.

DeFY'24 Hackathon

• Quantagon, a React web platform for creating and managing cryptocurrency quant funds.

Hackoverflow 3.0, Rajalakshmi Engineering College

- 2nd runner-up in a 24-hour inter-college hackathon for game development.
- Awards: 7500 cash prize.

Design Championship 2020, Mindbox and NASSCOM

- Runner-up in Nationals, Senior Game Design category.
- Awards: 30,000 prize.
  Car Game Using Unity
- Developed a car game using Unity, focusing on gameplay mechanics, realistic physics, and immersive graphics.

Custom Linux Distribution and Multi-Parallel Processing Application Project

• Developing a custom Linux distribution and a multi-parallel processing application using the POSIX library and CUDA.

Techno-Science Project Expo, Marine Technology Society, SRM MTS and ASCE Student Chapters

- Achievement: 2nd place in Al Robotics for designing a hand gesture-controlled robot.
- Awards: Silver Medal, Certificate, 2000 prize.

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#### **Education**

 Bachelors of Technology in Artificial Intelligence and Machine Learning: Vellore Institute of Technology, Chennai, Tamilnadu

#### Skills

- Programming Languages: C++, C, Java, Python, C#, Bash Scripting, HTML
- Frameworks & Libraries: TensorFlow, React, ROS2, Gazebo, Unity, Unreal Engine, AR/VR Development
- Tools & Platforms: Git, GitHub, Blender, Arduino, MongoDB, Firebase, SQL Plus, DBMS, AWS, Linux
- Data Analysis & Algorithms: Data Structures and Algorithms
- Soft Skills: Problem-Solving, Creativity, Teamwork, Analytical Thinking, Active Listening, Adaptability, CAD Modeling