Karthik Surendra Patnaik Potnuru





SUMMARY

Enthusiastic and solutions-driven developer skilled in Python, JavaScript, and front-end technologies, with hands-on experience building scalable applications and creative tools. Demonstrates a strong foundation in algorithms, system-level development, and modern web stacks including ReactJS and Node.js. Passionate about AI, automation, and intuitive UI/UX, with a proven ability to learn fast and contribute effectively in fast-paced environments.

EDUCATION

- B.Tech (Electrical and Electronics Engineering) from [Raghu Engineering College] JNTUK Kakinada , Andhra Pradesh in 2022, securing 7.67 CGPA
- Diploma (Electrical and Electronics Engineering) from [M.R.A.G.R.Govt.Polytechnic College], Vizianagaram, Andhra Pradesh in 2019, securing 75.35%
- AISSE from [D.A.V] Public School, Anakapalli, Andhra Pradesh in 2016, securing 8.3 CGPA

TECHNICAL SKILLS

Languages: Python, JavaScript, C

Libraries & Tools: Numpy, CV2, Pandas, Numba

Frameworks: ReactJS, Node.js, Django

Technologies: MongoDB, Git, GitHub, OpenWeather API, Bootstrap

Other Tools: Photoshop, PyCharm, Hyper

CERTIFICATIONS

Python (Basic) by HACKERRANK

Feb'23

- Acquired Python certification from HackerRank, demonstrating proficiency in core programming concepts, data structures, and problem-solving skills.
- Covered topics such as loops, conditionals, functions, and basic data manipulation and verified coding abilities through real-world problem solving scenarios.

EXPERIENCE

Trainee Engineer - STEM World

May 2025 -Oct 2025

- Developed and enhanced UI/UX for the company website, improving visual appeal and user experience.
- · Conducted website testing, identifying bugs and suggesting design improvements for optimal performance.
- Contributed to an open-source project, collaborating on feature enhancements and code quality.
- · Taught coding to children and efficiently managed tasks within deadlines, demonstrating strong time management skills.

App Developer - Sri Jayalakshmi Internet Services, Anakapalli

Jun 2022 - Jan 2025

- Designed and launched an app using Google AppSheet to automate data collection and billing processes, reducing manual workload.
- Implemented seamless integration with data sources to fetch real-time information, ensuring accuracy and reliability in calculations.
- · Automated bill calculations, improving operational efficiency and reducing errors by leveraging AppSheet's powerful functionalities.
- Delivered a user-friendly app interface accessible across devices, ensuring quick adoption and improved productivity for end-users.

PROJECTS UNDERTAKEN (Github)

3D Voxel Engine in [Python]

Jul'24

 Currently developing a 3D voxel engine with advanced shading and texturing capabilities and Leveraging Numpy, Numba, and ModernGL for high-performance graphics rendering.

Technologies: Python | Numpy | Numba | ModernGL

A* Pathfinding Algorithm in a Maze

Jun'23

 Developed an A* pathfinding algorithm to navigate through complex mazes and Utilized Pygame for visualization and Numpy for efficient array operations.

Technologies: Python | Pygame | Numpy

System Volume Control Application

Mar'23

 Created a Python application to programmatically control the system volume and Integrated OpenCV (CV2) for enhanced functionality and user interaction.

Technologies: Python | CV2

Automatic Chrome Dino Player

Feb'23

Developed an automated player for the Chrome Dino game using Python and Utilized image recognition and keyboard control to achieve high scores.
Technologies: Python | Numpy | Numba | NEET

Languages Know

English (Fluent)

Hindi (Proficient)

Telugu (Native tongue)