ABHIJITH UDAYAKUMAR

Al Engineer / Python Dev

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QUALIFICATIONS

MSc Artificial Intelligence (Distinction)

2022 - 2023

BCA Computer Applications (Distinction)

SRM Institute of Science & Technology 2019 – 2022

HONOURS/AWARDS

Intel AI AWARE/APPRECIATE 2021

Worked with Intel India for "AI FOR ALL – Digital India"

<u> Slash Key Champions - IEEE 2022</u>

Secured first position in a 30 Hour Hackathon (AI) by IFFF

Debugging Expert (C/Python) - SRM

Awarded with the title of Debugging Expert by SRM IST - 2019

SKILLS

Programming

Python, Java, JavaScript, GO, Typescript, Ruby, HTML5, CSS3, Prolog, C/C++

Frameworks

Ruby on Rails, React.js, Vue, Node.js jQuery

Python

Django, Flask, Numpy, Pandas, MatplotLib

Machine Learning/Al

GenAl, TensorFlow, fastai, Keras, Pytorch, scikit-learn, Tensorboard & Mlflow, Deep Learning, Computer Vision, Natural Language Processing, Reinforcement Learning

Development Tools

Docker, Git, Jenkins, Jupyter Notebooks, Visual Studio and Pycharm

Databases

MongoDB, MySQL, PostgreSQL dbsqlite, phpmyadmin

Cloud Services

AWS, GCP, Render and Heroku

O CAREER PROFILE

As a highly skilled and experienced AI professional, I am passionate about applying cutting-edge AI/ML techniques to solve real-world industry challenges. With a Master's degree in Artificial Intelligence and over 3 years of experience spearheading automation, analytics, and machine learning initiatives, I have a proven track record of developing innovative algorithms that have successfully addressed complex problems. My expertise in developing AI systems and predictive models has been demonstrated in multiple organizations, making me well-equipped to tackle challenges in various industries.

PROFESSIONAL EXPERIENCE

O Jun 2023 - Present

g1gabyte | Edinburgh

Al Support / Full Stack Developer

- Provided AI expertise through projects like an NLP meeting transcription pipeline that optimized workflows.
- Thrived in an agile and collaborative environment, regularly presenting AI solutions to leadership.
- Expanded technical skills in full-stack development, security, DevOps, automation, and integrating AI/ML.
- Developed backend systems and API services using Python/Django frameworks.

Aug 2020 - Sep 2022

GADS LLP | India

Technical & Operations support officer

- Spearheaded implementation of over 20 AI and automation projects, applying techniques like computer vision and NLP.
- Built robots using computer vision for warehouse automation to demonstrate cutting-edge Al applications.
- Led technical workshops on AI topics like machine learning and NLP to spread awareness and upskill the community.
- Communicated complex AI concepts clearly to executive stakeholders when proposing solutions
- Mentored students and colleagues on implementing AI applications using Python and key libraries.

O Aug 2019 - Dec 2022

Buddy Developer | India

CEO & Founder

- Led a team of students to develop over 100 real-time web and mobile applications, elevating technical skills and gaining full-stack development experience.
- Spearheaded end-to-end development including gathering requirements, designing solutions, writing code in languages like Python and JavaScript, integrating APIs, and deploying to production.
- Created the first IT club for the Science and Humanities department, establishing an inclusive technology community.
- Organized hackathons, workshops, and seminars to promote coding, project development, and peer learning among students.

PROJECTS HIGHLIGHT

Neuro-symbolic AI framework for autonomous driving

Developed and evaluated a hybrid framework that integrates machine learning and multi-agent systems to enhance the driving capabilities of self-driving cars. Used deep neural networks for perception tasks and agent-based systems for rational decision-making and adaptive behaviour. Demonstrated the framework on the CARLA simulator and compared the performance of different types of agents (human, NPC, ML) on various driving scenarios. Acknowledged by project supervisor, Dr. Rafael C. Cardoso, and former MSc Al student, Hilal Al Shukairi, whose previous work inspired the project.

Al-based interactive tool for teaching - Google MediaPipe

Developed an AI-based application that uses Google MediaPipe and Python to create an interactive tool that can be controlled by hand gestures. Implemented various features such as drawing, adding images, and interacting with images using different gestures. Used the application to demonstrate complex concepts in an intuitive and engaging way. Acknowledged by project guide, Dr. S. Albert Antony Raj.