

AKSHAY DESHPANDE

PYTHON ENGINEER

CONTACT

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TECHNICAL SKILLS

- PROGRAMMING
LANGUAGES: PYTHON
(SCIKIT-
- LEARN, PANDAS,)
- GOOGLE CLOUD
PLATFORM: CLOUD RUN,
- DATABASES: MYSQL,
MONGODB, BIGQUERY
- TOOLS: EXCEL, GOOGLE
SHEETS, GIT/GITHUB,
- Power BI

PROFILE

Detail-oriented Python Developer with a strong foundation in automation, data processing, and sensor integration. Leveraging hands-on experience in building efficient, Python-based solutions for real-time data analysis, IoT automation, and prototyping. Seeking to contribute technical expertise and innovation skills to a dynamic team, enhancing process automation and product development through optimized, scalable Python code.

EDUCATION

The Oxford College of Engineering
Bachelors in Mechatronics Engineering

JSS Polytechnic
Diploma in Mechatronics Engineering

WORK EXPERIENCE

Pecten Labs [Python Engineer]

- **GPAC Tagging Logic and Classification Framework**
Developed Python-based tagging logic for financial assets, implementing dynamic column mapping and override rules to classify large datasets efficiently, ensuring scalability and alignment with business requirements.
- **Configuration-Driven Asset Classification System**
Collaborated on a configuration-driven asset classification framework, enabling non-technical updates to rules via configuration files. Provided traceable output with rule IDs for transparent and accurate financial data classification.

Foley Designs [Innovation Engineer]

Aug 2018 – Jan 2022

- **Waste Management Vehicle Development**
Developed a Python-based waste management vehicle with automated sorting and route optimization, integrating sensors to improve efficiency and sustainability.
- **Miniature Duroflex Machine Prototype**
Built a Python-coded prototype with automated motors and lights, simulating full-scale operations for improved stakeholder engagement.
- **Automatic Hand Sanitizer Dispenser**
Created a touchless dispenser using Python, controlling sensors and motors to ensure hygiene, efficiency, and reduced cross-contamination risk.
- **Chandelier and Lighting Automation System**
Programmed automated chandelier lighting with Python, using sensors for evening activation, enhancing energy efficiency and user convenience.
- **UV Sanitization Automation System**
Developed a Python-based UV sanitization system with sensors, automating disinfection cycles post-use to enhance hygiene and safety.

- **Pothole Detecting Robot**

Created a Python-programmed robot with sensors and image processing, automating pothole detection to streamline road maintenance.

- **Automatic Plant Watering System**

Developed a Python-driven watering system that monitors soil moisture, automatically watering plants to optimize water usage.

- **Air Quality Monitoring and Purification System**

Developed an air quality monitor with Python, automating purification using sensor data for improved indoor air quality.