Job: Computer Vision Engineer / Data Scientist

Key Responsibilities:

- Develop and implement machine learning models for computer vision tasks, including:
  - Image processing
  - Object detection
  - Object tracking
  - Video analysis
- Design and build robust end-to-end pipelines for:
  - Data collection
  - Data cleaning
  - Data analysis to solve complex business problems
- Collaborate with cross-functional teams to integrate computer vision solutions into production environments.
- Perform data analysis and visualizations to uncover patterns and provide actionable insights for decision-making.
- Ensure code quality, maintainability, and best practices in model deployment and integration.
- Stay updated with the latest trends and advancements in machine learning and computer vision technologies.
- Utilize cloud technologies and big data solutions (e.g., Kafka) to improve model performance and scalability.
- Guide and mentor team members, prioritize tasks effectively, and manage multiple projects simultaneously.

Required Skills and Experience:

Technical Skills:

- **Experience:** 3 to 4 years of hands-on experience in data science with a strong focus on computer vision.
- **Programming:** Expertise in Python, including data structures and algorithms (DSA).
- **Libraries & Frameworks:**
  - Proficient in Pandas, NumPy, and Scikit-learn.
  - Experience with machine learning and deep learning frameworks: TensorFlow, PyTorch, or Keras.
- **Computer Vision Expertise:**
  - **Object Detection:** YOLO, Faster R-CNN, SSD
  - **Object Tracking:** SORT, Deep SORT, optical flow methods
  - **Image Segmentation:** U-Net, Mask R-CNN
  - **Image Classification & Feature Extraction**
  - **Face Recognition**
  - **Video Analysis:** Motion detection, event detection, frame-by-frame processing
- **Image Processing Techniques:** Filtering, thresholding, morphological operations, image transformations.

- **Large-Scale Datasets:**
  - Image annotation
  - Dataset creation for training computer vision models
- **Model Evaluation Metrics:** IoU, mAP, precision, recall.
- **Databases & Version Control:** Strong database knowledge and familiarity with GitHub.
- **Containerization (Preferred):** Experience with Docker is an added advantage.
- **Cloud & Big Data (Preferred):** Knowledge of cloud platforms and big data technologies (Kafka).
- **Edge Computing (Preferred):** Exposure to deploying models on Jetson, Raspberry Pi, or other edge devices for real-time applications.

Soft Skills:

- Strong problem-solving mindset and logical thinking.
- Ability to collaborate effectively with cross-functional teams.
- Positive attitude toward continuous learning and acquiring new skills.
- Excellent verbal and written communication skills.
- Strong teamwork and interpersonal skills.
- **Management Skills:**
  - Ability to mentor a team.
  - Prioritize tasks effectively.
  - Manage multiple projects simultaneously.