

## AWS Serverless Image Processing Architecture

The architecture diagram represents a serverless image processing application using AWS. The components included are:

### 1. **API Gateway**:

- Handles HTTP requests for image processing.
- Endpoints include:
  - POST /upload: For uploading images.
  - GET /images/{filename}: For retrieving processed images.

### 2. **AWS Lambda**:

- Two Lambda functions are connected to the API Gateway:
  - Image Processing Lambda (Upload & Resize): Handles image uploads, resizes images, and stores them in S3.
  - Retrieve Processed Image Lambda: Retrieves processed images from S3.

### 3. **Amazon S3**:

- Two S3 buckets are involved:
  - original-images: Stores the original uploaded images.
  - processed-images: Stores the processed (e.g., resized) images.

### **Data Flow**:

- The API Gateway triggers the respective Lambda function based on the HTTP request.
- The Image Processing Lambda uploads images to the 'original-images' S3 bucket and stores the

processed images in the 'processed-images' S3 bucket.

- The Retrieve Processed Image Lambda fetches the processed image from the 'processed-images' bucket and returns it through the API Gateway.