

To deploy the text classification service on AWS:

1. Assess resource needs and select suitable EC2 instance types.
2. Implement Auto Scaling and Elastic Load Balancing for scalability.
3. Configure CloudWatch for monitoring and alarms.
4. Utilize IAM, encryption, and security groups for security.
5. Containerize the application with Docker and deploy using EC2.
6. Continuously optimize costs by monitoring resource usage and adjusting as needed.
7. This approach ensures a scalable, monitored, secure, and cost-effective deployment on AWS.