Beta Presentation
Employee Badge Image Validation Tool

The Capstone Experience

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Project Overview

- Validates employee badge image against requirements
- Saves time for new hires and verification team
  - Instant feedback on proposed badge photos using machine learning
  - Accelerates new employee onboarding at Amazon
- Admin system to receive feedback from new hires and send updates to those hires, as well as model performance analysis.
System Architecture

Web Application

- React
- Node
- HTML
- CSS
- JS

AWS Cloud Services

- Amplify
- API Gateway
- Lambda
- Rekognition
- DynamoDB
- S3 Bucket
Welcome new hires! We look forward to seeing your contributions to the team! In preparation for your exciting first day, we invite you to pre-submit an image of yourself for your employee badge.

Explore Examples

Badge Image Requirements

- Look straight into the camera
- Include top of head to mid chest
- Person is centered in the image
- Background of the photo should be white
- Photo is properly exposed with no shadows
- Avoid sunglasses
- Avoid caps and hats
- Avoid tilting your head

*Daily religious attire is acceptable
*Minimum Requirement: An image of yourself and just yourself
*No feedback will be given to images that do not meet the minimum requirement
*Avoid cropping from a larger image if it sacrifices the quality of the image

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Admin Review Page

Please confirm if this image can be used for an Amazon badge

Badge Image Did Not Meet These Requirements:
- Person is centered in the image

Description: requirements say that this image is not centered but it looks good enough for me for badge image, please review.

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Model Performance Analysis

Inaccurate Rejections of Requirements by Rekognition Model

The figure below displays each requirement and the number of times an admin has overridden the models rejection of that requirement to submit the image to be used as a badge.

Our hope is to use this data to find weak points in our model, so we can target those areas and increase the accuracy of our model.

Select Chart Type: Bar Chart

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Custom Training Model
What’s left to do?

• Simple Bug Fixes
• Stretch Goals
  ▪ Mobile View Styling
  ▪ Increase confidence for use after semester and more accurate results
  ▪ Enhance overall styling
Questions?