# verify.college

Know-your-student (KYS)

Universitat Politècnica de Catalunya – BarcelonaTech

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# Intro

#### Demonstration

Want to try it yourself? Go to verify.college!

Otherwise, we have recordings

- Success on desktop
- Failure on desktop
- Success on phone
- Failure on phone

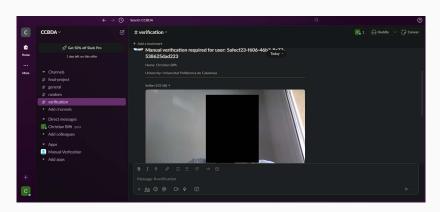
And for admins only, we can check the verification attempts!



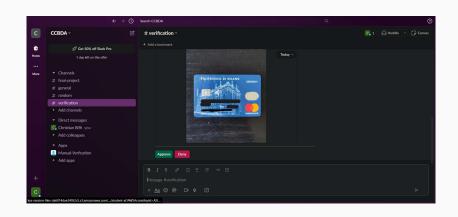
Audit page

#### Manual Verification i

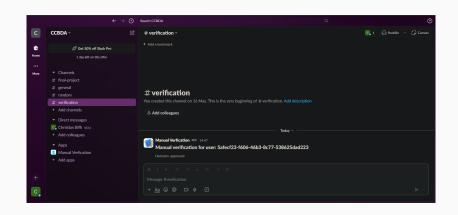
We even made a Slack Bot! 🤖



#### Manual Verification ii



#### Manual Verification iii



# Architecture

# **Guiding principles**

- Serverless
- Event-driven and asynchrounous
- Infrastructure-as-Code (IaC)

#### Verification Flow

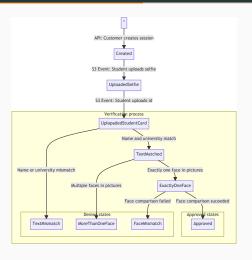


Figure 1: State diagram of the verification flow.

#### Architecture

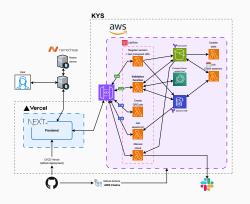


Figure 2: The implemented architecture.

**Components and Services** 

# Components and Services i

- · Vercel
- · Amazon API Gateway
- · Amazon Lambda Function
- · Amazon S3
- · Amazon DynamoDB
- · Amazon Rekognition
- · Amazon Cognito

# Components and Services ii

- · Docker
- · Terraform
- · Github
- · Github Actions

# proposal?

What changed since the project

#### Limitations

- Too many restrictions on the AWS Learner Lab
- We got banned from the AWS Learner Lab!



#### **Improvements**

```
app.route(
    "/session/{id}",
    methods=["GET"],
    content_types=["application/json"],
def get session(id: str):
@app.on_s3_event(
    bucket=APP_BUCKET_NAME,
    events=["s3:ObjectCreated:*"],
def handle_s3_event(event):
```

Takeaways

• Explore ecosystems beyond AWS! 🌐

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- Pre-signed URLs for the win!

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- Go async first, save time later! 🏅

