# E-mail attack detection, prevention, and threat hunting. Automated Phishing Detection with NLP -> (<u>sublime</u>)

- **Description**: Train an NLP model to detect phishing emails by analyzing text, URLs, and metadata. Deploy as a serverless API on Google Cloud.
- Tech Stack: BERT/Transformers, FastAPI, Google Cloud Functions.
- Skills Demonstrated: NLP, cybersecurity, cloud deployment.

# Aadhar UID Masking -> (devansh)

## **Multi-Cloud Disaster Recovery System**

- **Description**: Design a cross-cloud backup solution (AWS + Azure + GCP) with automated failover and recovery testing.
- Tech Stack: Terraform, Kubernetes, Python.
- **Skills Demonstrated**: Multi-cloud architecture, IaC, resilience.

#### **Zero-Trust Authentication for Remote Work**

- **Description**: Implement a zero-trust authentication system using biometrics (face recognition) and behavioral analytics (keystroke dynamics).
- Tech Stack: OpenCV, React.js, OAuth 2.0, Redis.
- **Skills Demonstrated**: Cybersecurity, MFA, modern authentication.

### Cloud-Based Secure File Storage with Hybrid Cryptography

Implement a system using AES-256 and RSA algorithms for encryption, deployed on AWS/Azure. Integrate machine learning to detect unusual access patterns

#### **Zero-Trust Authentication for Cloud APIs**

Implement OAuth 2.0 + OpenID Connect with biometric verification (facial recognition via TensorFlow) for securing REST APIs hosted on cloud platforms

 $\textbf{Skills Evaluated}: API \ security, \ biometric \ authentication, \ cloud \ deployment.$ 

## **Health Monitoring and Analytics Platform**

- Develop a system for collecting and analyzing health data
- Create secure APIs for integration with wearable devices
- Implement ML models for health anomaly detection

•	Design intuitive dashboards for patients and healthcare providers