

# WELCOME TO THE **2025 SPRING SYMPOSIUM**

## INTERNATIONAL ADMISSIONS: **Standards and Best Practices to Prevent Fraud in the AI Era**

May 26, 2025  
Southwestern College  
Chula Vista, CA

**AIRC**  
The Association of International  
Enrollment Management

# WELCOME TO THE **2025 SPRING SYMPOSIUM**

Thank you to our partners!

## ***Mitigating Credential Fraud from Red Flags to Emerging AI***

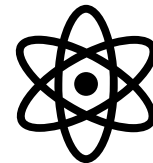
# Presenters:

- **Marybeth Gruenewald, Director of Global Initiatives**
- **Aleks Morawski, Director of Evaluation Services**





# Elements of Interest



**History of Fraud Detection**  
**Online Verification/Authenticity Procedures**  
**Credential Evaluation and AI: Forming a Policy**

# Where art thou, Fraud?

International Admissions  
Applications

Bank Statements

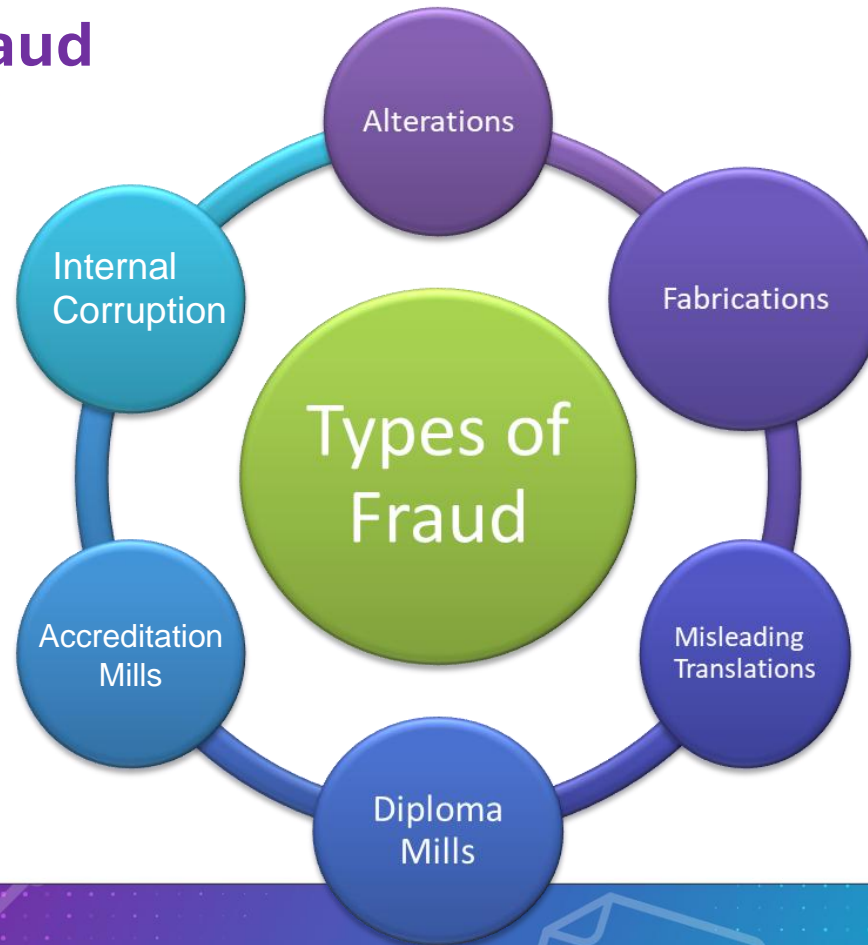
Academic Credentials

Letters of acceptance

English Language Proficiency Scores

Admission exam  
scores

# Types of Fraud







# Walk down memory lane



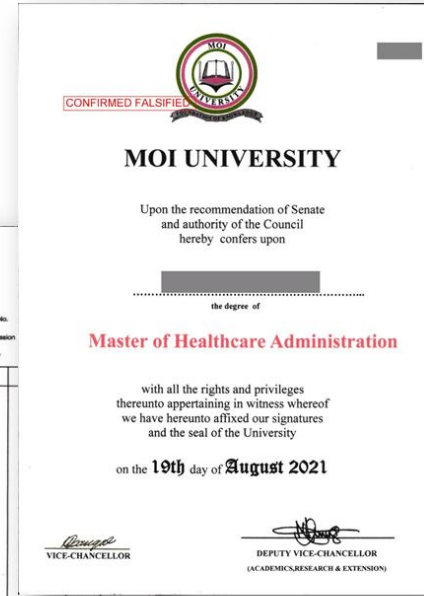
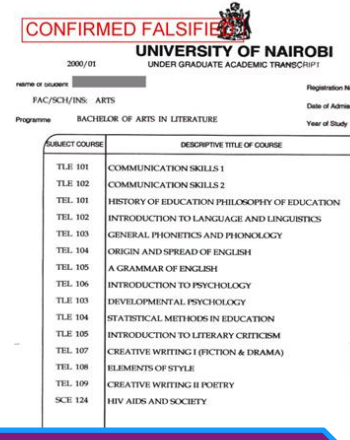
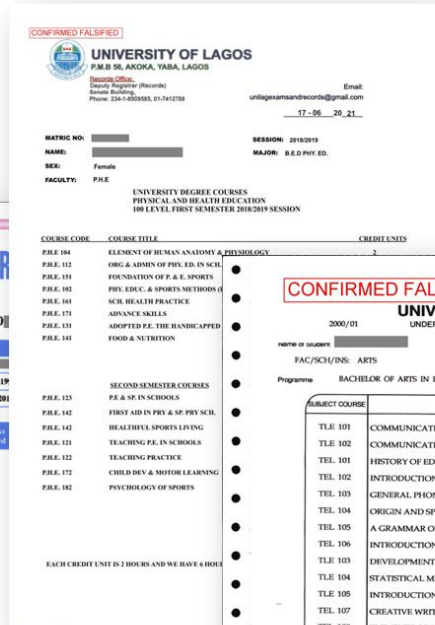
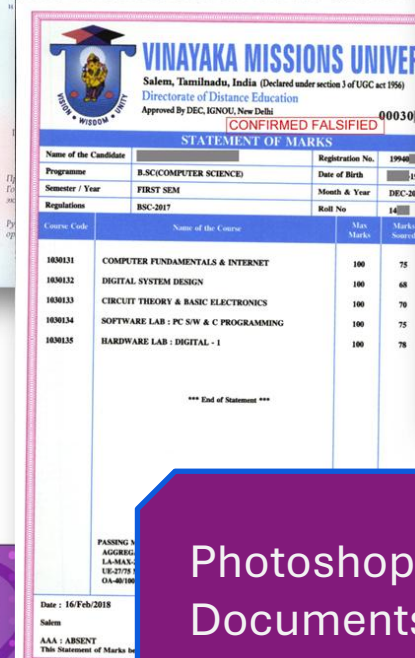
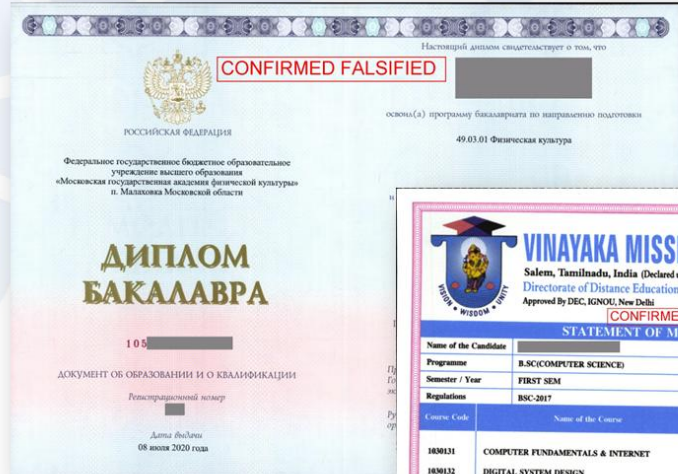
Seals and signatures  
(digital vs ink)

Logo



Altered  
documents

# Common sources of academic fraud



Online  
purchases

Photoshopped  
Documents

Fake Seals  
And Stamps

Corruption



# Example: Signature hijacking in a Letter of Acceptance

**Bonus: bad grammar**

**See next slide...**

15 November 2010

Student ID: 00 5  
Ref No.: CUS-10 /1

To,

## ACCEPTANCE LETTER / OFFER OF ADMISSION

We are delighted that you have requested to admission in Master Programme in International Project Management for Jan-2011 intake.

Thank you for your application to the Chalmers University. I am very pleased to inform you that Chalmers University would like to make you an Un-Conditional Offer of a place on our Master Programme in International Project Management. This is a full time programme that starts 24<sup>th</sup> January 2011 and will end on 31 December 2012. Please plan to arrive in Chalmers University at least one week before the start of your intake in order to attend the introductory events that the Chalmers University.

### Programme Details

Full Name	:	
Programme Title	:	Master
Faculty	:	International Project Management
Duration	:	2 years
Starts from	:	2011-01-24
Completion	:	2012-12-31
Application Fee	:	€ 100.00
Paid	:	€ 100.00

### Conditions:

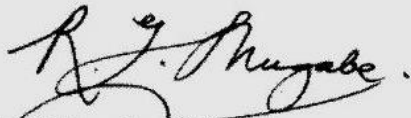
Verification of all supporting documents and fulfillment of visa requirement by Swedish Migration Board.

I would like to take this opportunity to congratulate you on gaining this un-conditional offer and wish you every success in your forthcoming examinations and hope to welcome you in Jan-2011.

  
Robert Mugabe  
Head of International Admissions

# Compare Signatures

and wish you every success in your forthcoming exam  
Jan-2011.



**Robert Mugabe**  
Head of International Admissions

**Alma mater** University of Fort Hare  
University of South Africa  
University of London

**Religion** Roman Catholicism

**Signature** 

**Nickname(s)** Uncle Bob<sup>[1]</sup>

**Robert Mugabe**



Mugabe in 1979

2nd **President of Zimbabwe**

**In office**

31 December 1987 – 21 November 2017


## Personal details

<b>Born</b>	Robert Gabriel Mugabe 21 February 1924 <a href="#">Kutama, Southern Rhodesia</a> (now Zimbabwe)
<b>Died</b>	6 September 2019 (aged 95) <a href="#">Gleneagles Hospital</a> , Singapore
<b>Resting place</b>	Kutama, Zimbabwe
<b>Political party</b>	<a href="#">ANCYL</a> (1949–1952) <a href="#">NDP</a> (1960–1961) <a href="#">ZAPU</a> (1961–1963) <a href="#">ZANU</a> (1963–1987) <a href="#">ZANU–PF</a> (1987–2017)
<b>Spouses</b>	<a href="#">Sally Hayfron</a> ( <span>m.</span> 1961; died 1992) <a href="#">Grace Marufu</a> ( <span>m.</span> 1996)
<b>Children</b>	4, including <a href="#">Bona</a> and <a href="#">Robert Jr</a>
<b>Alma mater</b>	University of Fort Hare University of South Africa University of London International Programmes
<b>Signature</b>	



## Red Flags:

- ✓ Blurry University emblem
- ✓ Grades and fonts differ
- ✓ Degree name not written
- ✓ Weak seals


Blurry University Emblem

**UNIVERSITY OF NAIROBI**  
 FACULTY OF EDUCATION  
 PROVISIONAL UNDERGRADUATE ACADEMIC RESULT SLIP

Name of Student: \_\_\_\_\_ Registration No.: E35/1850/96  
 FACULTY: EDUCATION Academic Year: ~~XXXXXX~~ 1999/2000  
 Programme B.ED. Year of Study: ~~XXXXXX~~ FOURTH

COURSE CODE	DESCRIPTIVE TITLE OF COURSE	ACADEMIC MARKS	GRADE
TAP 401	EDUCATIONAL PLANNING	45	A
TFD 401	COMPARATIVE AND CONTEMPORARY ISSUES IN EDUCATION	45	D
TPS 402	INTRODUCTION TO SPECIAL EDUCATION	45	A
REC 401	DEVELOPMENT PLANNING	45	B
REC 402	PUBLIC PLANNING AND POLICY	45	A
REC 407	OPERATIONS ANALYSIS	45	B
REC 414	URBAN AND REGIONAL ECONOMICS	45	A
REC 416	ADVANCED MICRO-ECONOMIC THEORY	45	C
REC 417	ADVANCED MACRO-ECONOMIC THEORY	45	A
RCM 401	MANAGEMENT OF HUMAN RESOURCES	45	A
RCM 402	PURCHASING AND MATERIAL MANAGEMENT	45	B

Name of degree awarded is typically written out here  
 Weak Seal

RECOMMENDATION  
 SECOND CLASS, UPPER DIVISION  
 DEAN, FACULTY OF EDUCATION  
 COLLEGE OF EDUCATION AND STUDIES,  
 UNIVERSITY OF NAIROBI

KEY TO GRADING SYSTEM  
 A = 70% - 100% - Excellent  
 B = 60% - 69% - Credit  
 C = 50% - 59% - Satisfactory  
 D = 40% - 49% - Pass  
 E = 39% and Below - Fail

Date Issued: 3/10/2002 Signed: \_\_\_\_\_  
 Weak seal



Rector's name is wrong for this time period. It should be **Francisco Virtuoso**.

Caracas, a los veintidos  
bajo el acta N° 049 del libro

Rector,  
*Francisco Virtuoso*

Profesor  
*[Signature]*

En fe de lo cual firmo el presente Diploma  
Instituto. Caracas, a los veintidos  
registrado bajo el acta N° 364 del libro

Rector,  
*Francisco Virtuoso*

Profesor  
*[Signature]*

Resuelto: *[Signature]*  
Conforme a lo dispuesto en el artículo 15  
Bolivariana de Venezuela, se refrenda el Título de

CONFIRMED FALSIFIED

# Universidad Católica Andrés Bello

Luis Ugalde, S.J.,  
Rector de la Universidad Católica Andrés Bello

Hago saber:

Por cuanto la Bachiller

Ciudadana de la Cédula de Identidad N° V- [Redacted], aspirante al título de Licenciado en Educación, ha cumplido con todos los requisitos exigidos por las Leyes y Reglamentos, en nombre de la República y por autoridad de la Ley le confiero el Título de:

## Licenciado en Educación Mención: Integral

Tómese razón de este Diploma en la Secretaría de esta Universidad, reconóscase y téngase en toda la República a la ciudadana Ariana Elena Garcés Lárez, como tal Licenciado en Educación, con todos los derechos que otorgan las Leyes y Reglamentos

En fe de lo cual firmo el presente Diploma en unión del Secretario, el Decano de la facultad respectiva y de dos Profesores de esta Institución. Caracas a los doce días del mes de Enero del año dos mil quince. Años: 204° y 155°

*[Signature]*  
El Rector  
Luis Ugalde

Profesora  
Polanda López

*[Signature]*  
El Decano  
Juan I. Modoleto

*[Signature]*  
El Secretario  
María J. Martínez

*[Signature]*  
Profesora  
Pinocha Rodríguez

### Resuelto:

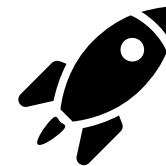
Conforme a lo dispuesto en el artículo 182 de la Ley de Universidades y por disposición del ciudadano Presidente de la República Bolivariana de Venezuela, se refrenda el Título de Licenciado en Educación, otorgado por la Universidad Católica Andrés Bello a la ciudadana Ariana Elena Garcés Lárez, en el año 2016, bajo el N° [Redacted]

Oficina Principal de Registro Público del  
Estado Miranda  
Caracas (13 de febrero  
del 2016). Registrado bajo el

El Registrador Principal

Margarita Grossep P.  
Registradora Principal  
Edo- Miranda

Registrador  
El Ministerio del Poder Popular  
Para La Educación Universitaria



# Moving Forward: Forensics

## Basic Tools required:

- ❖ Portable UV Light
- ❖ Illuminated Magnifier

## Benefits:

- ❖ Portable
- ❖ Inexpensive
- ❖ Easy battery replacement



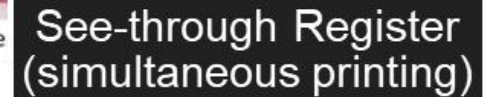
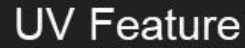
Source: ECE.Inc



Source: ECE.Inc

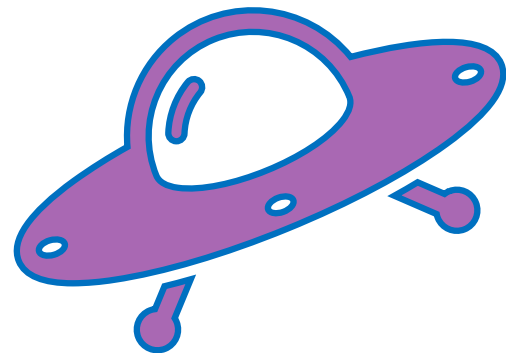
*See what your eye cannot!*





# The Future is Now

- ❑ **Examination Results:** National Exam Boards
- ❑ **List of Graduates/Grade report verifications:** Institutional websites
- ❑ **Thesis repositories:** Available to the Public; usually in library
- ❑ **Third Party Verifications:** Reports verifiable online
- ❑ **Electronic Document Platforms:** Issues via secure software sites
- ❑ **QR Codes:** depends on the code



# Verification Databases

- Usually require additional information about student
- May require VPN access (blocked countries)
- Different from online access to student's account
- May produce written results or image of verified document

14:46 Формирование и ведение  
obrazdov.gov.ru

Сохранить

Фамилия на русском [REDACTED]

Имя [REDACTED]

Отчество [REDACTED]

Название организации выдавшей документ

Федеральное государственное автономное учреждение высшего образования «Казанский (Приволжский) федеральный университет» (КФУ) ОГРН 1021602841391

Дата выдачи 30.06.2020

Серия бланка [REDACTED]

Номер бланка [REDACTED]

Квалификация БАКАЛАВР

Специальность БИОЛОГИЯ

Год поступления 2016

Ген. директор [REDACTED]

教育部学位与研究生教育发展中心  
CHINA ACADEMIC DEGREES & GRADUATE  
EDUCATION DEVELOPMENT CENTER

认证报告  
CREDENTIALS REPORT

验证码: [REDACTED]

认证日期: 20[REDACTED]

男  
期: 1995年[REDACTED]  
级: 学士  
予单位: 沈阳工业大学  
专业领域: 电子信息工程  
类(专业学位类别): 工学  
年份: 2017年  
号: [REDACTED]

教育部学位与研究生教育发展中心

全国学位授予信息数据库及学位授予单位授予学位予记  
自2018年11月18日至2019年05月17日有效。  
上方的“验证码”请到“中国学位与研究生教育信  
息degrees.cn/cyna/gateway.html”进行验证或使用  
手机扫描二维码进行验证。

Ministry of Education  
Intermediate and Secondary Education Boards  
Bangladesh

Official Website of Education Board

HSC/Alim/Equivalent Result 2022

Roll No [REDACTED] Name [REDACTED]  
Board DHAKA Father's Name [REDACTED]  
Group BUSINESS STUDIES Mother's Name [REDACTED]

AKA COLLEGE

Grade  
A+  
A+  
A+  
A+  
A+  
A+

Powered by [REDACTED]

WAECDIRECT ONLINE - RESULTS  
http://www.waecdirect.org/Display

THE WEST AFRICAN  
EXAMINATIONS COUNCIL  
Official website

Click here to visit our corporate website

Results

Candidate Information

Examination Number [REDACTED]  
Candidate Name MAY/JUN WASSCE2015  
Examination PACE SETTERS' COLLEGE, WUYE  
Centre

Subject Grades

COMMERCE	B2
FINANCIAL ACCOUNTING	B3
BOOK KEEPING	A1
ECONOMICS	B2
ISLAMIC STUDIES	B3
CIVIC EDUCATION	C5
ENGLISH LANGUAGE	B3
MATHEMATICS	C6

Click Here to Print

Print Result

# Lists of Graduates

- (1) LAUREN SILEY HAWKINS GEOGRAPHY AND HISTORY  
(2) LOUISE EKAH NJI ECO-BIO-ENG-BUS-LLT-B  
(3) NFOR MONDE HARLETT ECO-ENG-C-Geo-A-HIS-C  
(4) TABI BAWAH EFFIE BLANDINE ENG-D-HIS-C-REL-D  
(5) JAMES LAUREN PAMELI TUTTE ENG-E-HIS-C-LLT-E-PH-B  
(6) ABE ELIZABETH OUNG ECO-E-HIS-C-PH-E-REL-C  
(7) ABIA AMAH THALIA EKPING BIO-CHE-E-PSY-A-CT-E  
(8) OJONG SUSAN AGBOR ENG-D-HIS-E-PH-D-REL-D  
(9) MBANNY ONERI A FUNGAMBI ECO-E-ENG-D-Geo-E-HIS-D  
(10) MENKEM JULIUS NAKAKO ECO-E-ENG-E-HIS-D-PH-E

## Passed In 3 Subjects: 32

- (1) SALLI JAMES ECO-B-Geo-A-HIS-B  
(2) THOMAS NJIE LIMBA ECO-B-ENG-A-HIS-B  
(3) MIRIAM TEMBE NOOH ECO-B-HIS-B-LLT-B  
(4) KANA JANE ECO-B-HIS-B-LLT-B  
(5) CYRIL AYIMBA JR ECO-A-Geo-B-PHIS-C  
(6) AKWA NANCY ANYA ECO-C-ENG-A-HIS-C  
(7) NFORI COURAGE FAKI ECO-D-Geo-B-HIS-C  
(8) EFANDE JOSEPH NGANE HIS-C-PH-B-REL-E  
(9) MUSA MELANIE MALU ECO-D-ENG-D-Geo-B  
(10) ELIZABETH NJOMO ESSEMBE HIS-C-LLT-E-PH-B  
(11) KPLUM CLAUDIA FON BIO-E-ENG-E-PSY-A  
(12) NIZGAM GUETO HUANG SONELLE ENG-D-HIS-B-PH-E  
(13) MONICA ELISABETH SANDI WALA ENG-D-LLT-E-REL-B  
(14) BESSONG BLESSING TABE BIO-E-PSY-A-Geo-E  
(15) ARREY CHRISTABEL MOUSSA BIO-E-ENG-E-PSY-B  
(16) KANGE CASIMIR ETONGE ENG-D-HIS-C-PH-E  
(17) TAH ENJOH MALUECA ENG-D-Geo-E-HIS-C  
(18) ENANG KATHLEEN FOLIN ENG-C-HIS-E-PH-D  
(19) ATABONG AWUNG ALAN FONGI-CT-E-REL-D  
(20) TABOT GREGORY TABOT GEO-E-HIS-C-PH-E  
(21) EPOSI MARTHA EKO ENG-D-HIS-D-LLT-E  
(22) TUA GLADYS NGENDO FONGI-HIS-E-REL-E  
(23) ACHEN CHASE FESTUS ASHAI BIO-D-CHE-E-CT-E  
(24) MENGOT DAVID AGBOR BIO-PH-E-REL-E

- (23) EISA CHARLES HERMAN NIIZE HIS-E-REL-C  
(24) EBOT ONKE JENNET HIS-E-REL-C  
(25) CHIFU CYNTHIA RINKUYI BIO-E-PSY-C  
(26) EMELI JOSEPH ENA GEO-E-HIS-D  
(27) TAYU DEBORAH MCGILADYS HIS-D-PH-E  
(28) FOSSOH PRUS MBI ENG-D-FRE-E  
(29) NGWE NANCY YEDHAS GEO-E-HIS-D  
(30) EFANGE GUSTAF KWANGGO GEO-E-HIS-D  
(31) KWELLE MESAJIBE GLOVIS ENG-D-HIS-E  
(32) SCOTT GABRIEL WABINE CHD-CT-E  
(33) SULA BIANCA NJEH ENG-E-HIS-D  
(34) AKUJUNG ERIC NOEM HIS-D-PH-E  
(35) EBONG ASSOULA VICTORINE FSN-D-HIS-E  
(36) MUAKKE KATHY NJIE GEO-E-HIS-D  
(37) EKAKHE ARMEL ROCH NJINAH GEO-E-HIS-D  
(38) CLARIS MOALA HIS-D-LLT-E  
(39) KONEH YVETTE YOUNY HIS-E-REL-D  
(40) MONGING PATRICK MONGING HIS-D-LLT-E  
(41) SOPHIE SANDRA KAME ENG-E-REL-D  
(42) OSCAR EWELE MENYU ENG-E-HIS-D  
(43) OJONG CARLSON BENNELLA BIO-E-CHE-D  
(44) ASONGANYI BRIAND TREVOR NKONGHO BIO-E-CHE-D  
(45) AGBORIOTI OBEHAI MARTIN GEO-E-HIS-D  
(46) GODEY NGONJA KAMBE FSN-D-HIS-E  
(47) TAYU GLADYS GAMBO HIS-E-REL-D  
(48) KANGA DORIS GEO-E-PH-E  
(49) ALJANGIR FONGSON FONGSON HIS-E-PH-E  
(50) ELOMBO CHIANJUN STEVE BIO-E-CHE-E  
(51) EPOME HERONARD NOTUTU GEO-E-HIS-E  
(52) SYLVA ANON ABANGA HIS-E-REL-E  
(53) SALLI PHLOMINA MBI HIS-E-LLT-E  
(54) NKONGHO EBOT JEMINA ENG-E-HIS-E  
(55) SONG UZETH EMMA ENG-E-HIS-E  
(56) ASHWANG ASONGANYI EMMANUEL GEO-E-HIS-E  
(57) NGIDE MARY FONGI ENG-E-HIS-E

## Iraq Universities

ردیف	سال تحصیلی	تعداد	نام	نام دانشگاه	ردیف
1	2014 - 2015	82,403	م.ی	بازار آزاد	1
2	2014 - 2015	76,99	م.ی	سرو کمال ابراهیم	2
3	2014 - 2015	76,938	م.ی	شاکو مهدی سلیم	3
4	2014 - 2015	76,622	م.ی	شنه فریاد قادر	4
5	2014 - 2015	75,973	م.ی	سائندرا مؤید عطا الله	5
6	2014 - 2015	75,362	م.ی	نور سه رگهات عبد القادر	6
7	2014 - 2015	75,125	م.ی	زارا خراسو یاسین	7
8	2014 - 2015	74,551	م.ی	عبد الله لیث محمد	8
9	2014 - 2015	74,152	م.ی	راستی حمز صادق	9
10	2014 - 2015	73,71	م.ی	سیف ایاد فاضل	10
11	2014 - 2015	73,355	م.ی	سؤلاف حمید صالح	11
12	2014 - 2015	72,493	م.ی	سازان قاضی قس	12
13	2014 - 2015	71,938	م.ی	دیلان دالشد قادر	13
14	2014 - 2015	71,577	م.ی	فیروز هیدماد جمال	14
15	2014 - 2015	70,865	م.ی	کامران ملا محمد ملا غفور	15
16	2014 - 2015	70,634	م.ی	پدشدار ابراهیم حمد	16
17	2014 - 2015	70,005	م.ی	ژیله رافیق مجید	17
18	2014 - 2015	69,596	م.ی	یدسوز فؤاد عثمان	18
19	2014 - 2015	68,89	م.ی	حسن نهاد عز الدین	19

44. LAURA, Espira Muthoni  
45. LINTEI, Erastus Sayo  
46. MACHUKA, Dorothy Kuntuo  
47. MAIYO, Reuben Kiprotich  
48. MAKONGOLO, W Remy  
49. MALELLI, Joyce Wanza  
50. MARACH, Gladys J  
51. MARLENI, Felister  
52. MARTI, Kaprnt Erasmus  
53. MBUTHIA, Teresia Nyokabi  
54. MESHACK, Lwande Nelson

80. RONO, David Kimutai  
81. SANG, Kibet Curtis  
82. SIMPHILE, Barns  
83. THARUBA, Joseph Ndwaru  
84. VUDISU, Rad Ozwany  
85. WAINAINA, Wambui Grace  
86. WAMOYO, Michael  
87. WANJALA, Shamback Brian  
88. WEKESA, Caleb  
89. WINNIE, Omuyoi Nyamoi



3<sup>rd</sup> Graduation Ceremony, December 2014

BACHELOR OF BUSINESS MANAGEMENT (HUMAN RESOURCE MANAGEMENT)

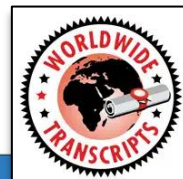
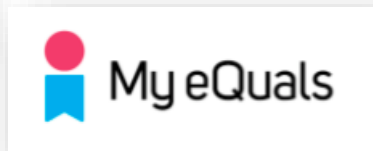
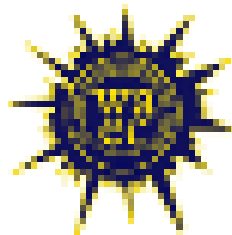
FIRST CLASS HONOURS

Kenya  
Graduation Books

GCEs Cameroon



# Electronic Document Platforms





# Online Verification Tips

**Check documents for mention of verification.**

If documents have verification link or QR code, try to confirm it through official website of issuing institution.

**Search website of institution/board/ministry who issued the documents.**

Look for "Verification", "Results", "Graduates", "Authentication", etc. in the language of the website.

**Search exact thesis title.**

Pay attention to source – Is it a university site or a database that gets its information directly from universities?

Does it confirm institution, level of study, date?

Be cautious of platforms to which anyone can contribute.

**Watch out for fake verification sites – may mimic real ones.**

If possible, see if you can find your way to verification site from official institution/board/ministry site.

Be wary of sites with URL similar to known official site.

**Keep in touch with other colleagues in the field to share information on online verification resources and electronic documents.**

# Top challenges in international admissions

## ChatGPT (OpenAI):

- Credential Evaluation
- Language Proficiency Assessment
- Fraud and Document Verification
- Regulatory and Visa Issues
- Recruitment and Outreach
- Financial Aid and Affordability
- Cultural Sensitivity and Communication
- Competition from Other Institutions

## Gemini (Google):

- Increasing Complexity of Applications
- Cultural and Linguistic Differences
- Financial Considerations
- Declining Enrollment
- Diversity and Inclusion
- Political and Economic Instability
- Managing Expectations
- Technology and Data Management

## Claude (Anthropic):

- Credential Evaluation
- Verifying Document Authenticity
- Language Barriers
- Visa and Immigration Issues
- Cultural Context
- Financial Verification
- Recruitment Logistics
- Geopolitical Factors

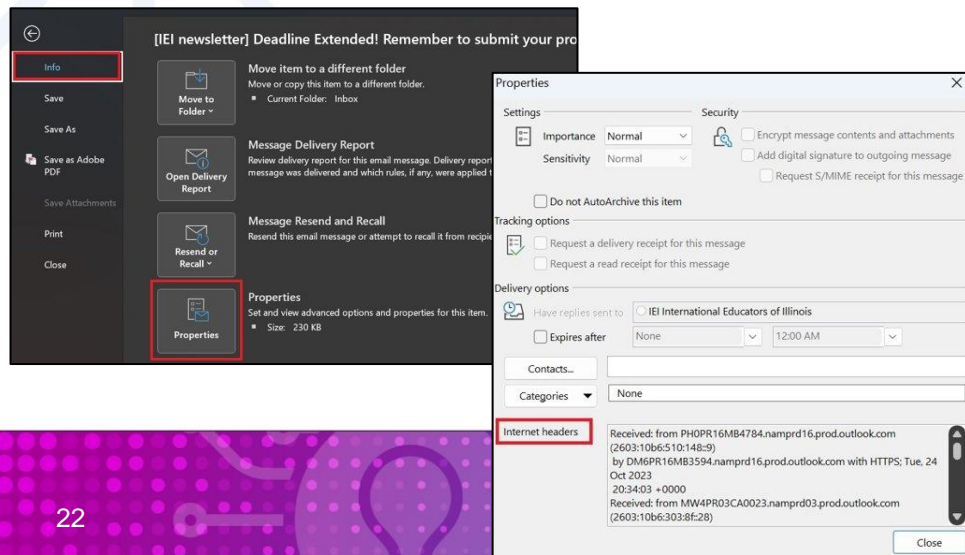
## Email Spoofing Basics

- What is email spoofing?
- First you need to access the “header”
- This is when someone sends an email with a fake sender address. They are trying to make it appear that the email is coming from a legitimate, authorized address, when, in reality, it is coming from somewhere else.

# Accessing the Header

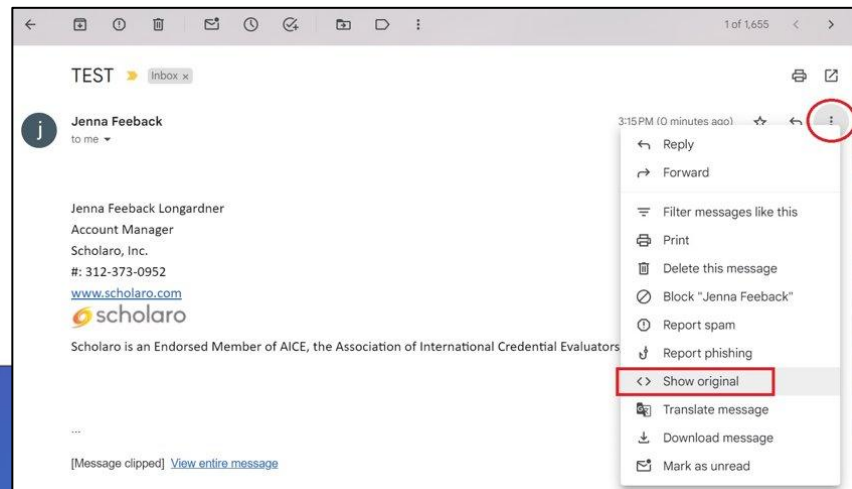
## Outlook

- Open the email in its own window
- File→Info→Properties→Internet Headers



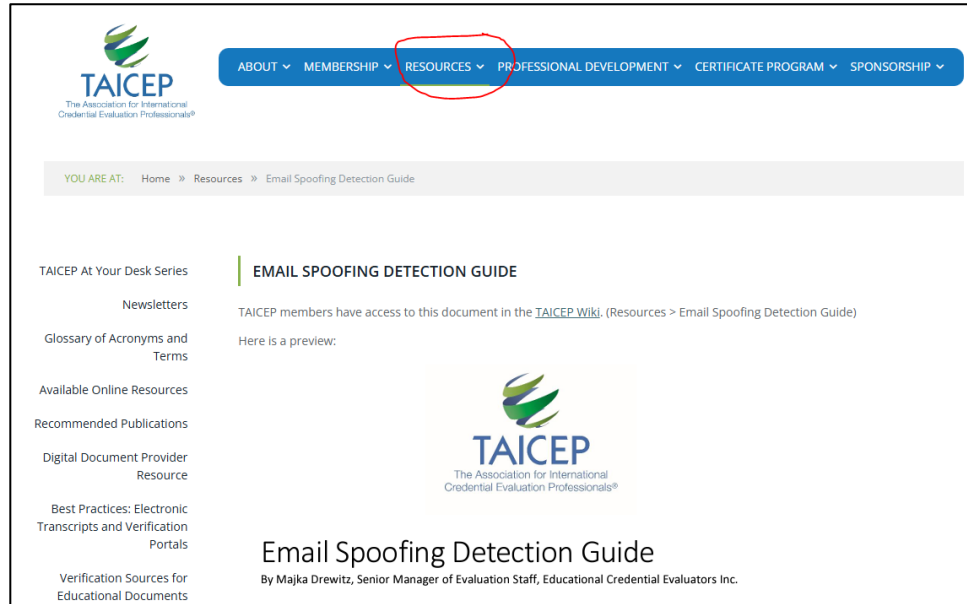
## Gmail

- Click on the three dots in the upper right corner
- Click “Show original” and then the header will pop up



# Header Analysis

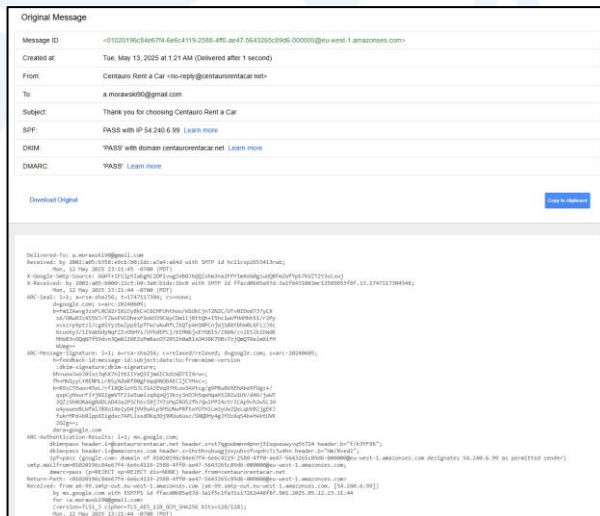
- Domain name: Does it match the institution's website?
- IP Address: Does it match the location of the institution?
- Authentication results: We want them to be “pass”
- Return Path: Is the return path email the same as the sending email?



The screenshot shows the TAICEP website header. The navigation menu includes: ABOUT, MEMBERSHIP, RESOURCES (circled in red), PROFESSIONAL DEVELOPMENT, CERTIFICATE PROGRAM, and SPONSORSHIP. Below the header, a breadcrumb trail reads: YOU ARE AT: Home » Resources » Email Spoofing Detection Guide. The main content area is titled 'EMAIL SPOOFING DETECTION GUIDE' and includes a preview of the document. The TAICEP logo is also visible.

<https://wiki.taicep.org/en/home/Resources>





Here's the breakdown of the origin:

- **Return-Path / MAIL FROM address:**  
`01020196c84e67f4-6e6c4119-2588-4ff0-ae47-5643265c89d6-000000@eu-west-1.amazonaws.com`  
This indicates that the email was sent using Amazon SES from the EU West (Ireland) region.
- **Sending mail server IP:**  
`54.240.6.99` — this IP belongs to Amazon Web Services (SES).
- **DKIM Signatures:**  
The email is **cryptographically signed by both** `centaurorentacar.net` **and** `amazonses.com`, indicating that it was authorized by both the brand and the email delivery platform (Amazon SES).
- **SPF and DMARC authentication:**  
These checks **passed**, meaning Gmail verified that Amazon SES was permitted to send on behalf of `centaurorentacar.net`.
- **Envelope sender (From):**  
`Centauro Rent a Car <no-reply@centaurorentacar.net>`

**Summary:**

The email originated from **Amazon SES servers in the EU-West-1 region (Ireland)**, and was sent on behalf of **centaurorentacar.net**, a legitimate domain used by Centauro Rent a Car. The authentication results indicate the message is likely legitimate and authorized by the brand.

Let me know if you'd like to trace IPs, investigate headers more deeply, or verify potential phishing risk.

# Digital document alteration

## Image files

- Vector images / Formulas
  - PDF, EPS, AI (Adobe Illustrator)
- Secure or unsecure
  - Does your digital image fall apart?
- Raster images / Pixels
  - JPEG, GIF and PNG
- Not easily editable
  - Must edit individual pixels
  - Easy to retouch, not easy to modify elements
- Resolution
  - DPI (Dots per inch) PPI (Pixels per inch)
  - Websites display 72dpi. Print min. 300dpi
- Mixed resolution is a red flag
  - Pixelated images, or pixelated elements

## Image file formats

99d



### Raster images

Pixel-based graphics  
Resolution dependent  
Photos & web graphics

JPG

Web & print  
photos and  
quick previews

GIF

Animation &  
transparency in  
limited colors

PNG

Transparency  
with millions  
of colors

TIFF

High quality  
print graphics  
and scans

RAW

Unprocessed  
data from  
digital cameras

PSD

Layered Adobe  
Photoshop  
design files



### Vector images

Curve-based graphics  
Resolution independent  
Logos, icons, & type

PDF

Print files and  
web-based  
documents

EPS

Individual  
vector design  
elements

AI

Original Adobe  
Illustrator  
design files

These vector image formats can also  
incorporate raster elements.

## Image color formats



CMYK is a 4-color printing  
process that stands for cyan,  
magenta, yellow and key (black).



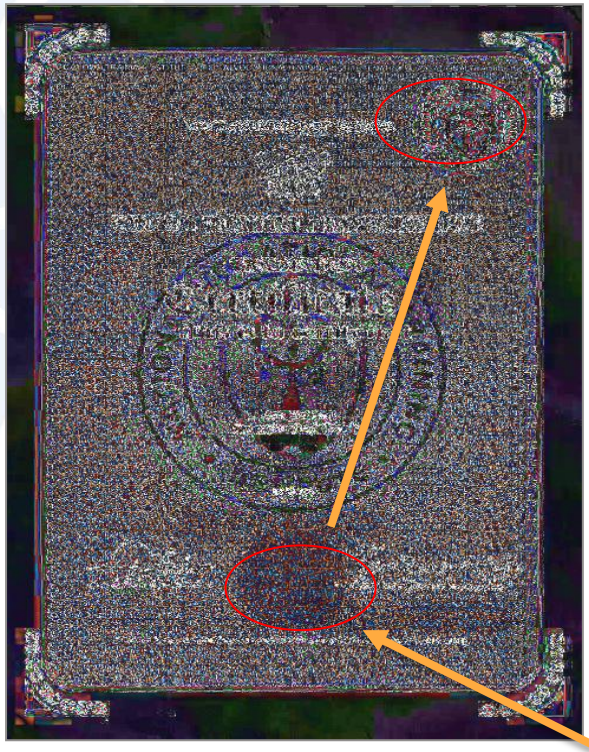
RGB is a light-based color model  
that stands for red, green  
and blue.

## Unsophisticated Forgery

- I have a raster image file
- Let me convert it to a vector image file, add a text box and type my name and GPA
- They'll never notice!



**BUSTED**



## Digital Forensics

- **Digital forensics** can reveal surgical edits to AI-assisted forged documents.
- Invisible to naked eye
- Redacted and un-redacted docs can be used to create forgeries
- Best with raster images
- AI assistants can analyze Error Level Analysis (ELA) images

A sample document where the redaction and discipline were removed with AI and the logo relocated





## Tricky Verification Situations



## Case Study: Mexico

Not confirmed,  
but many **red**  
**flags**

SEP  
SISTEMA EDUCATIVO NACIONAL  
SUBSECRETARÍA DE EDUCACIÓN MEDIA SUPERIOR  
SERVICIO NACIONAL DE BACHILLERATO EN LÍNEA  
CERTIFICADO DE TERMINACIÓN DE ESTUDIOS  
EDUCACIÓN VIRTUAL


\*Prepa en Línea - SEP\*, con Clave de Centro de Trabajo 09DBH0001D, certifica que

con Clave Única de Registro de Población [REDACTED] y número de matrícula E1607H09145, acreditó totalmente el plan de estudios de bachillerato con formación elemental para el trabajo, en el periodo del 04 de mayo de 2015 al 28 de agosto de 2017, con 276 créditos, de un total de 276.

**PROMEDIO DE APROVECHAMIENTO:** 8.0 OCHO PUNTO CERO

Módulos acreditados de formación profesional básica:

	Calif.	Total de Hrs.	Créditos
Tecnología de información y comunicación	8.2	120	12.0
De la información y conocimiento	8.3	120	12.0
El lenguaje en la relación del hombre con el mundo	8.1	120	12.0
Técnicas y valores del mundo	7.4	120	12.0
Argumentación	9.7	120	12.0
Mundo en otras lenguas	6.0	120	12.0
Mi vida en otras lenguas	6.0	120	12.0
Ser social y sociedad	7.9	120	12.0
Sociedad mexicana contemporánea	7.8	120	12.0
Transformaciones en el mundo contemporáneo	9.2	120	12.0
Representaciones simbólicas y algoritmos	8.7	120	12.0
Matemáticas y representaciones del sistema natural	9.0	120	12.0
Variación en procesos sociales	9.8	120	12.0
Universo natural	9.8	120	12.0
Hacia un desarrollo sustentable	9.6	120	12.0
Evolución y sus repercusiones sociales	8.8	120	12.0
Estadística en fenómenos naturales y procesos sociales	9.0	120	12.0
Calculo en fenómenos naturales y procesos sociales	7.8	120	12.0
Óptica en la naturaleza: el movimiento	7.2	120	12.0
Optimización en sistemas naturales	9.0	120	12.0
Impacto de la ciencia y la tecnología	5.9	120	12.0
Tecnologías emergentes en la resolución de problemas	6.4	120	12.0
Tecnologías emergentes para la administración y gestión	9.8	120	12.0



**Autoridad educativa:** Silvia Beatriz Ortega Salazar - Subsecretaría de Educación Media Superior.

**No. certificado autoridad educativa:** 00001000000402056562

**Sello digital autoridad educativa:**  
 JTYEqV6jWZ2GCM4KmdV3bs9QkFar3N7PsvLWHcd027bxZz8//xco8+H2h2W83E1jLWPZgr7zw/V4j05vLnoo  
 C3142HjXs92wvE+UsZaeTFU/Kn/97C4GhY0YabUfAcde0bHGrAaJhZnKrdwbW9nY2VUjF7QJXFCvnduSCgn//  
 YDuu43BAC22011Unly9ebgs1FBUj/KmQIGm6fR4jRjxx/9S3x4lpe0SCqkqygr7xvWm06bQKVCokMYHJF956  
 CX+DSBfcy/N4HPhYg2IAHQIQke3IMBIRf+r5YH6T5sxA80M5ogLkdfgxhKSj2QH18A==

**Fecha y hora del timbrado:** 19/08/17 09:01:54

**Sello digital SEP:**  
 N/emwgFL7+opufE7m+3N+UOLs70A3cLV4p3M23r/InPop1VJD8R0dFOWtYEDJTao/OfSdx/QNnCbFQwNmN8cgedj  
 pJP+lyEU2UwqVagXOut8o5Zmf3Y76o5mMTz7zu99qewsUhhHdG6HjKSj5jwXtdjFwdI61nCG871cFvWbCuhM+x

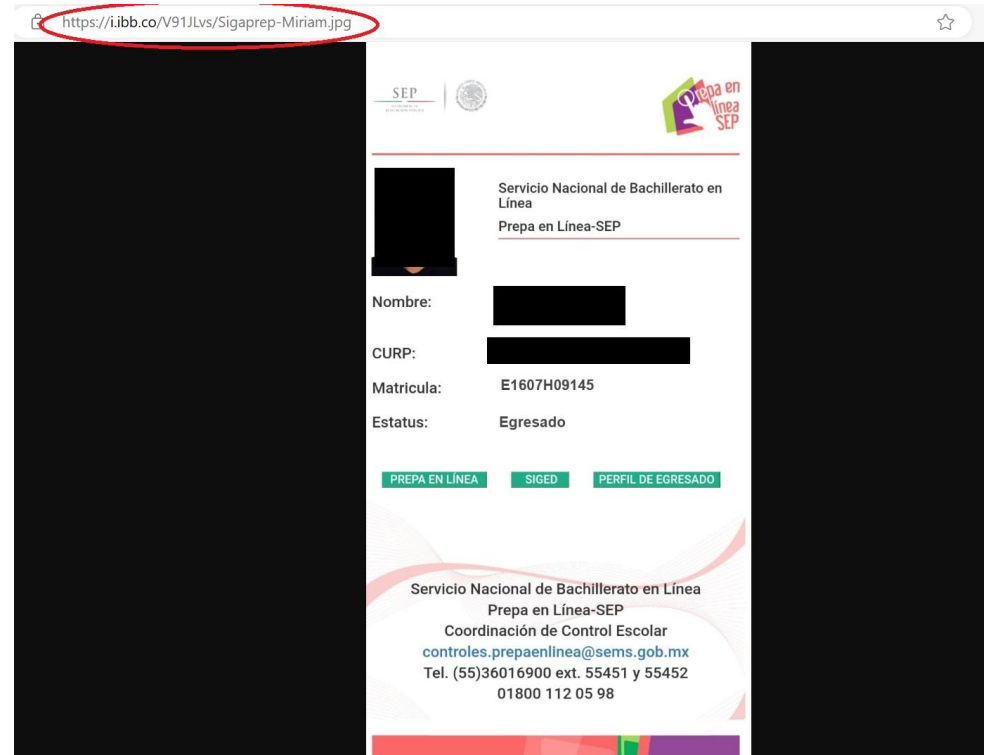
El presente Certificado de Terminación de Estudios ha sido firmado mediante el uso de la firma electrónica avanzada, amparada por un certificado vigente a la fecha de su elaboración; y, es válido de conformidad con lo dispuesto en los artículos 1, 2, fracciones IV, V, XIII, y XIV, 3, fracciones I y II, 7, 8, 9, 13, 14, 16 y 25 de la Ley de Firma Electrónica Avanzada; 7 y 12 del Reglamento de la Ley de Firma Electrónica Avanzada.

**Folio** 3d607306-28a3-42b6-9a6d-78e5dc832be2

El presente documento se imprime en Álvaro Obregón, Ciudad de México, a los 19 días del mes de agosto de 2017.

## QR Code Spoofing:

The QR code went to an image sharing website (not the school or government website) and provided a “verification”



We looked on the school website and found a verification section  
<https://prepaenlinea.sep.gob.mx/validarcertificado/>

A different student's information came up using the Folio No.

**Verificación de Certificados**

Prepa en Línea-SEP

Indicaciones

En el siguiente recuadro, deberás introducir el Folio del certificado que deseas verificar.

Folio:

Para cualquier duda o información, ingresa a: [Mesa de Servicio](#)

---

**Detalle del documento: "Certificado de Terminación de Estudios".**

**Datos del estudiante**

**Nombre y apellidos:** [REDACTED]

**Matrícula:** E1607H09042

**Datos del plantel o servicio educativo**

**Institución educativa emisora:** Servicio Nacional de Bachillerato en Línea, "Prepa en Línea-SEP"

**Plantel o servicio educativo:** Servicio Nacional de Bachillerato en Línea, "Prepa en Línea-SEP"

**Clave de Centro de Trabajo:** 09DBH0001D

**Trayectoria académica y datos del documento**

**Plan de estudios:** Bachillerato, con formación básica para el trabajo

**Promedio:** 8.0 Ocho

**Créditos obtenidos:** 276 de un total de 276

**Periodo de estudios:** 04 de abril del 2016 al 05 de agosto del 2018

**Tipo de documento:** Certificado de Terminación de Estudios

**Estatus:** Registrado en el SIGED

**Folio:** 3d607306-28a3-42bf-9a6d-78e5dc832be2

**Fecha y hora de timbrado:** 19 de octubre del 2018 a las 09:01:54

**Documento Validado.**

[Validación con SIGED](#)

## Case Study: India

**Verified fraud**

**SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY**  
(An Autonomous Institution under JNTUH)  
Sheriguda(V), Ibrahimpatnam(M), R.R.Dist.501 510, India  
(Approved by AICTE, New Delhi and Affiliated to JNTUH)


**D4**

HT. No.: [REDACTED] SI. No. : SIAPC 04091

PC. NO. 31905D400829 CMM No.: 21905D400829

**PROVISIONAL CERTIFICATE**

This is to certify that Mr. [REDACTED]  
Son of [REDACTED]  
passed B.TECH(MECHANICAL ENGINEERING) degree  
examination of this Institution, held in June 2019 and that he was  
placed in FIRST CLASS WITH DISTINCTION  
He has satisfied all the requirements for the award of the degree.

Hyderabad

  
Controller of Examinations

  
PRINCIPAL

Date : 18/07/2019 




We verified their degree on the Telangana State Council of Higher Education's website but they were listed in Second Class rather than First Class with Distinction

Telangana State Council of Higher Education TSCHE

SAYS HOME

### TSCHE:: Student Academic Verification Service

Student Photo	Your Input	
	University	JNTU, Hyderabad
	Degree	BTECH
	Year Passed	2019
	Hall Ticket No.	[REDACTED]

### Your search Output

Field Name	Field Contents
HTNO	15D41A0387
STUDENT_NAME	[REDACTED]
FATHER_NAME	[REDACTED]
PERCENTAGE	54.6
RESULT	Second Class

**SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY**  
 (An Autonomous Institution under JNTUH)  
 Sheriguda(V), Ibrahimpatnam(M), R.R.Dist.501 510, India  
 (Approved by AICTE, New Delhi and Affiliated to JNTUH)

D4

HT. No.: [REDACTED] SI. No. : SIAPC 04091

PC. NO. 31905D400829 CMM No.: 21905D400829

[REDACTED]

**PROVISIONAL CERTIFICATE**

This is to certify that Mr. [REDACTED]  
 Son of [REDACTED]  
 passed B.TECH(MECHANICAL ENGINEERING) degree  
 examination of this Institution, held in June 2019 and that <sup>he</sup> was  
 placed in FIRST CLASS WITH DISTINCTION  
 He has satisfied all the requirements for the award of the degree.

[QR CODE]

[Barcode]

Hyderabad

Date : 18/07/2019

Controller of Examinations

PRINCIPAL

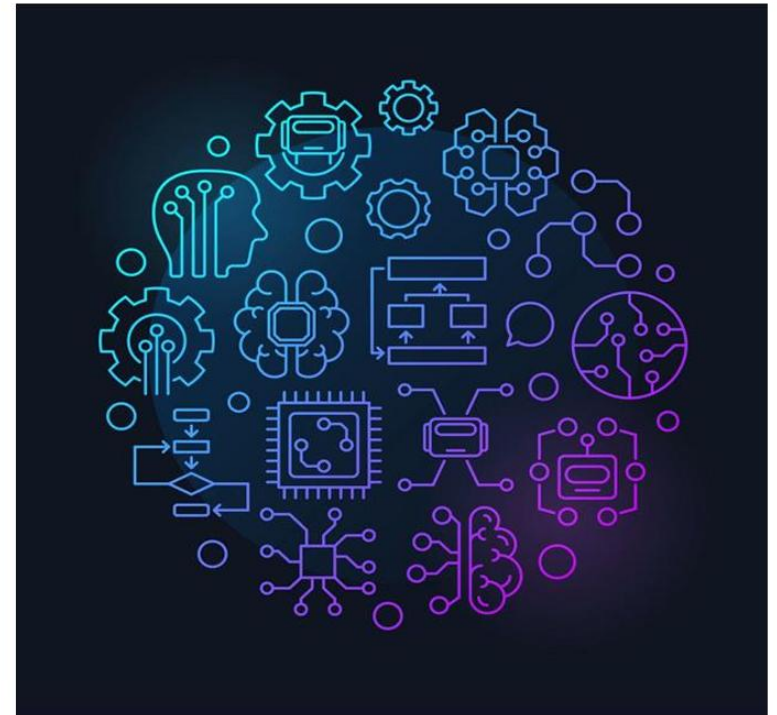
Scanning the QR code gave  
the text:

**MECHANICAL ENGINEERING**  
**[redacted info] June 2019**  
**SECOND CLASS 2015 - 2016**  
**3112/5700 54.60%**

This was **confirmed**  
**fraudulent.** They did earn the  
 degree, but their marks were  
 tampered with to give them  
 First Class with Distinction

# Use of AI in Credential Evaluation

<https://aice-eval.org/evaluation-guides/>



## Use of Artificial Intelligence in Credential Evaluation: A Principled Approach

Prepared by: Association of International Credential Evaluators (AICE)

November 2024



# 1. Inclusive growth, sustainable development and well-being



- AI carries inherent non-neutrality
- Ask, then challenge the outputs of AI
- Training AI for your own purposes  
benefits the profession



## 2. Human rights and democratic values, including fairness and privacy

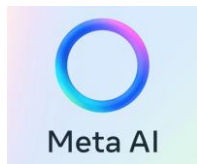
- Respect the law, human rights and democratic values while using AI



## 3. Transparency and explainability

- Vet AI platforms
- Ask for primary sources

## 4. Robustness, security and safety



- Be selective and critical
- Focus on security and safety
- Protect client/applicant information

## 5. Accountability

**Anthropic CEO: “We Do Not Understand How Our Own AI Creations Work”**

<https://www.techrepublic.com/article/news-anthropic-ceo-ai-interoperability/>

**Google admits it doesn't know why its AI learns unexpected things: "We don't fully understand how the human mind works either“**

<https://www.marca.com/en/technology/2025/04/01/67ec12a4268e3ed4708b4582.html>

- Testing for normative performance
- Bias checks
- New developments daily

**"This is an exciting and confusing time, and if you haven't figured out how to make the best use of AI yet, you are not alone."—Bill Gates**

# Resources

- <https://groningendeclaration.org/trust-hub/> Groningen Declaration Network, T.R.U.S.T. Hub
- <https://www.taicep.org/taiceporgwp/resources/digital-document-provider-resource/> TAICEP Digital Document Providers
- <https://www.taicep.org/taiceporgwp/resources/global-directory-of-national-qualification-frameworks-01/> TAICEP Directory of NQFs
- <https://www.darioamodei.com/essay/mac-hines-of-loving-grace> How AI Could Transform the World for the Better, Dario Amodei
- <https://www.nafsa.org/ie-magazine/2024/1/10/generative-ai-and-global-education> Generative AI and Global Education, International Educator, NAFSA
- <https://www.eaie.org/resource/ai-higher-ed.html> EAIE: How AI is shaking up higher education
- <https://theconnection.ece.org/> ECE® Connection, resources and tools for educational credential evaluators





***Thank You!***

