05/05/25 Notes

CIA
C | Confidentiality
I | Integrity
A | availability

Risk - likelihood and impact a threat will will exploit vulnerability

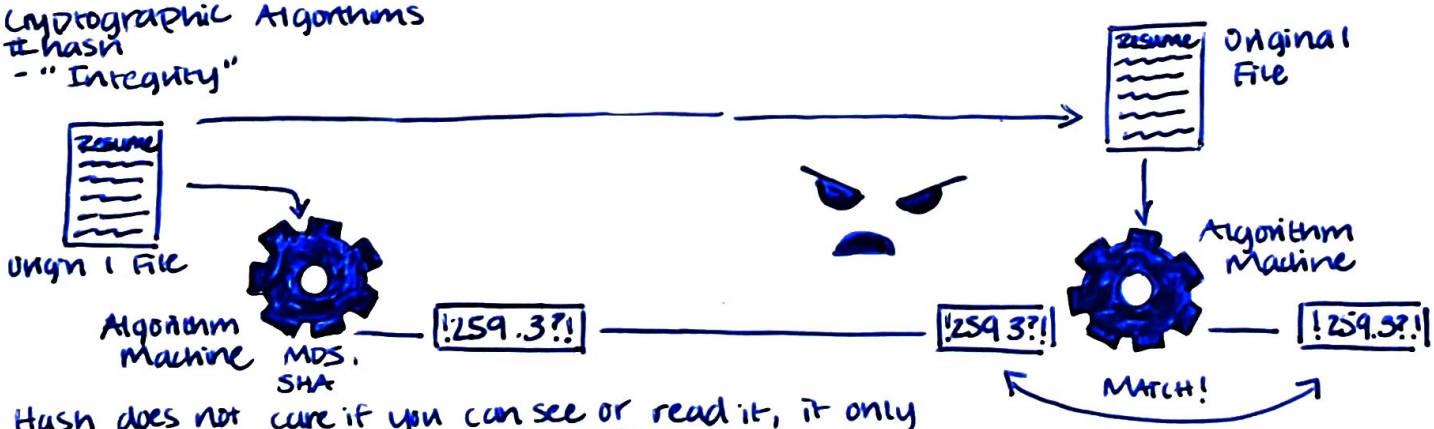
- Threat: harmful event
  - → man-made
  - → natur
- Vulnerability: weakness
- Likelihood: % probability (exploit)
- Impact: $$$ (always measured in $)

Compliance = "Law" and "Regulations"
GDPR = EU privacy
PCI DSS = "credit card"

Security Controls = "Counter Measure"
BIA, BCP, DRP

In cryptography, people spends their life to encrypt something that is NOT meant to be broken "secret writing"

Cryptographic Algorithms
#hash
- "Integrity"



Hash does not care if you can see or read it, it only cares if you are going to mess with it!
Algorithm to remember for hash:
1) MD5
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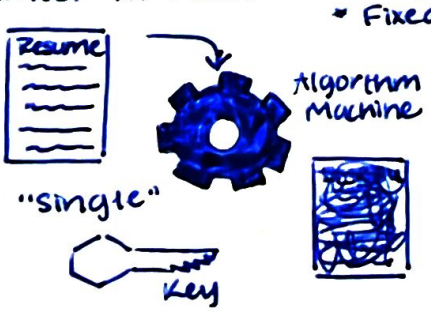
- NOT Reversible
- Fixed Size

ALGORITHM # MD5/SHA
1). Symmetric: RC5, AES, 3DES, DES
2). Asymmetric: RSA, D.H, ECC



Symmetric key = "single"
- requires a key
  1). RC5
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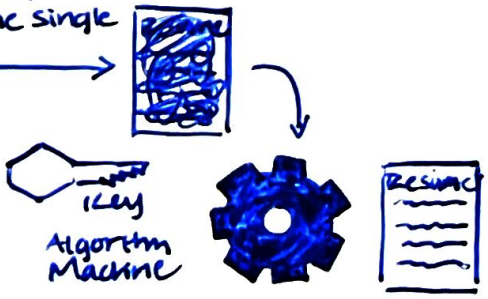
- private key
- encryption
- confidentiality

- Method starts with receiver!. Not sender

How does recepient get copy of the single key?



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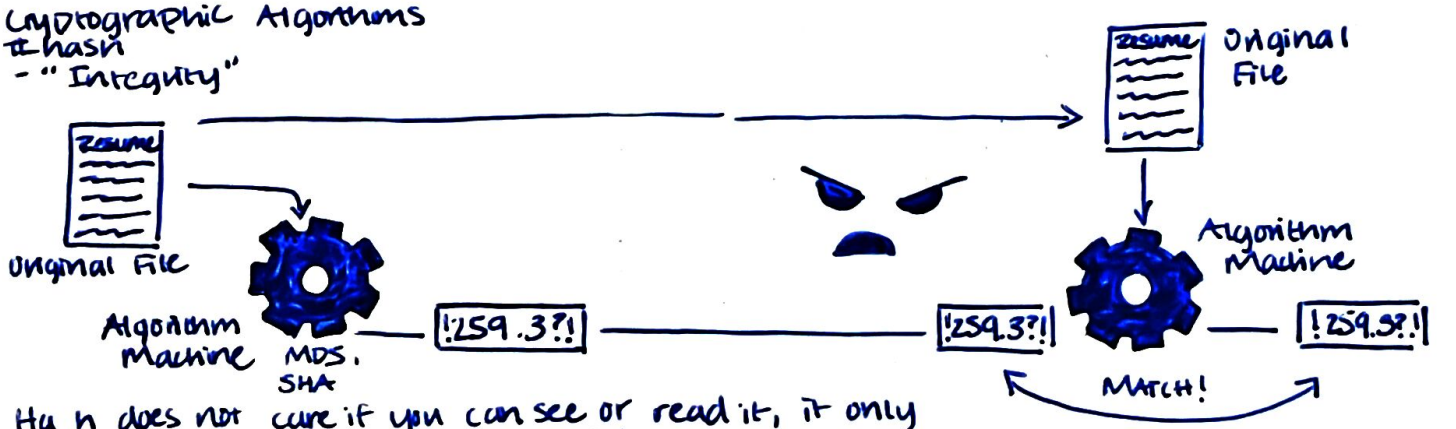

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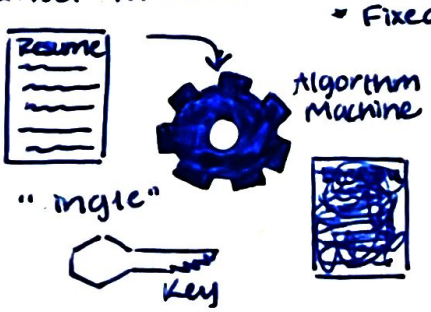

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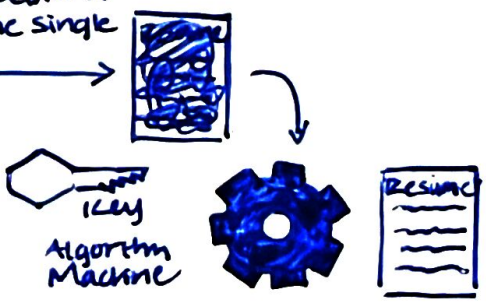

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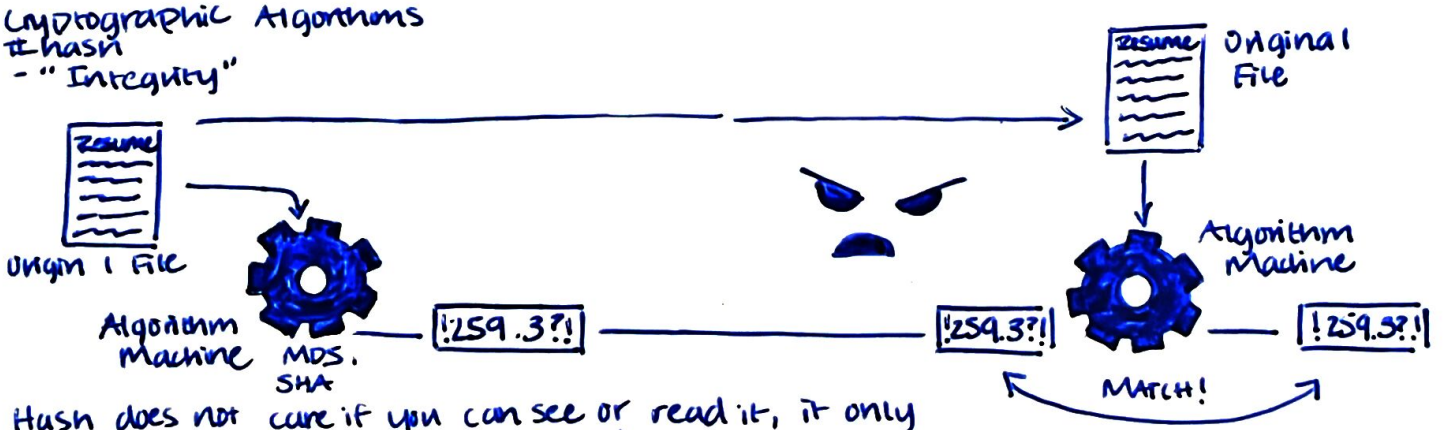

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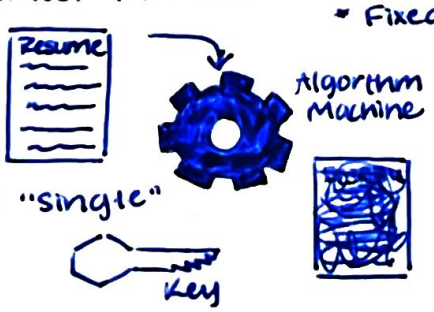

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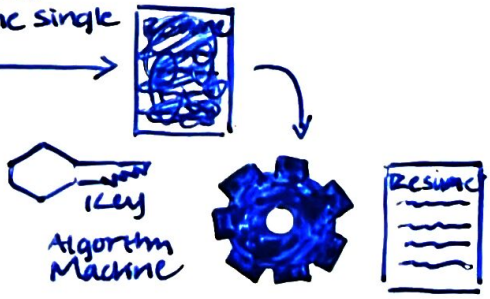

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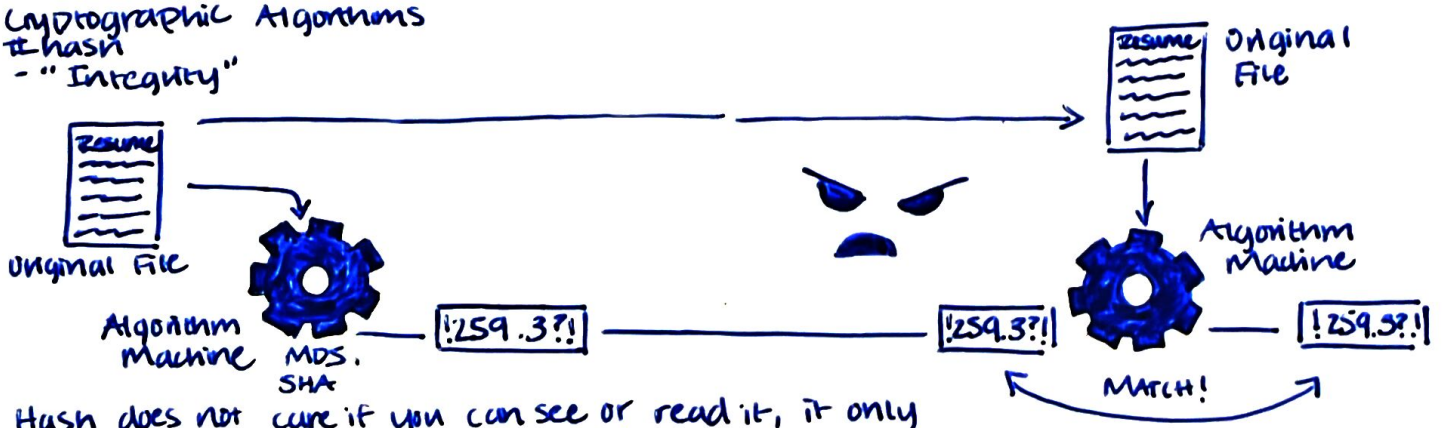

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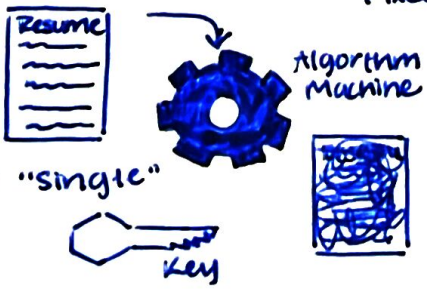

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