**Regex Patterns for Identifying PII Entities**

The following regex patterns help identify Personally Identifiable Information (PII) in text, even if represented in various formats.

**1. Full Name**

**Pattern:**  
\b[A-Z][a-z]+ [A-Z][a-z]+\b

**Example:**

* John Doe
* Alice Smith

**2. Gender**

**Pattern:**  
\b(Male|Female|Non[- ]binary|Transgender|Other|male|female|non[- ]binary|transgender|M|F|NB|T|m|f|t|nb|Mr|Mrs|Ms|Miss|Mx)\.?\b

**Examples:**

* Male
* Female
* Non-binary
* Mr.

**3. Date of Birth**

**Pattern:**  
\b(?:\d{1,2}[-/.]\d{1,2}[-/.]\d{2,4}|\d{4}[-/.]\d{1,2}[-/.]\d{1,2}|(?:\d{1,2}(?:st|nd|rd|th)?[-\s])?(?:Jan(?:uary)?|Feb(?:ruary)?|... *(trimmed for brevity)*

**Examples:**

* 15/02/1990
* 1995-05-12
* 25th December 2000

**4. Nationality**

**Pattern:**  
\b(Indian|INDIAN)\b

**Example:**

* Indian
* INDIAN

**5. City**

**Pattern:**  
(?:lives in|resides in|is based in|is located in|in|is in|stays in|is a resident of|is a citizen of|calls(?: it)? home)\s+([A-Za-z\s-]+)

**Examples:**

* Resides in Mumbai
* Located in Hyderabad
* Lives in Banglore

**6. Email Address**

**Pattern:**  
\b[A-Za-z0-9.\_%+-]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,}\b

**Example:**

* john.doe@example.com

**7. Phone Number**

**Pattern:**  
\b(?:\+91[\-\s]?)?(?:\(?91\)?[\-\s]?)?[6789]\d{2}[\-\s]?\d{3}[\-\s]?\d{4}\b

**Examples:**

* +91 9876543210
* 987-654-3210

**8. Aadhar Number**

**Pattern:**  
\b[2-9][0-9]{3} [0-9]{4} [0-9]{4}\b

**Example:**

* 2345 6789 1234

**9. PAN Card Details**

**Pattern:**  
\b[A-Z]{5}[0-9]{4}[A-Z]{1}\b

**Example:**

* ABCDE1234F

**10. Voter ID Number**

**Pattern:**  
\b([A-Z]{3}[0-9]{7})\b

**Example:**

* XYZ1234567

**11. Passport Number**

**Pattern:**  
\b[A-Z][1-9][0-9] ?[0-9]{4}[0-9]\b

**Example:**

* M1234567

**12. Driving License Number**

**Pattern:**  
[A-Z]{2}[-\s]?\d{2}[-\s]?\d{4}[-\s]?\d{7}

**Example:**

* DL-04-2023-1234567

**13. Bank Account Details**

**Pattern:**  
\b\d{11,18}\b

**Example:**

* 123456789012

**14. Credit Card and Debit Card Information**

**Pattern:**  
\b\d{4}[- ]\d{4}[- ]\d{4}[- ]\d{4}\b

**Example:**

* 1234-5678-9012-3456

**15. IP Address**

**Pattern:**  
\b(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\b

**Examples:**

* 192.168.0.1
* 10.0.0.255

**16. IFSC Code**

**Pattern:**  
\b[A-Z]{4}[-\s]?0[-\s]?[A-Z0-9]{6}\b

**Example:**

* HDFC0001234

**17. Expiry Date**

**Pattern:**  
\b(?:0[1-9]|1[0-2])\/[2-9][0-9]\b

**Example:**

* 08/25

**18. CVV**

**Pattern:**  
\b[Cc][Vv][Vv]\s(?:was|is|of)\s(\d{3})\b

**Example:**

* CVV is 123