



FORENSICS @ NIST

#NISTForensics

The Making of **NIST SPECIAL DATABASE 302**

07 November 2018

Gregory Fiumara
greg@nist.gov



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Search datasets...

Order by: Popular

Datasets ordered by Popular

Filter by location Clear

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303,109 datasets found

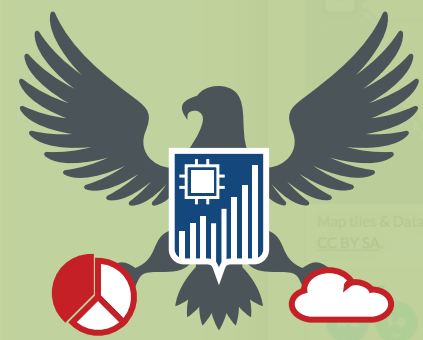
ZIP Code Data 1797 recent views

Department of the Treasury – This study provides detailed tabulations of individual income tax return data at the state and ZIP code level.

HTML HTML HTML HTML Esri REST KMZ 11 more in dataset

Local Government (17951)

AAPI (1095)



Federal Data Strategy

Leveraging Data as a Strategic Asset



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Special Database

27





The screenshot shows a Google Scholar search interface. The search bar contains the text "NIST Special Database 27". Below the search bar, the results section displays "About 108,000 results (0.12 sec)". A red callout box highlights this text and points to a larger white box with a red border that contains the text "About 108,000 results". The search results list several articles, including "NIST special database 27: Fingerprint minutiae from latent and matching tenprint images (2000)" by MD Garris and RM McCabe, and "NIST special database 19" by PJ Grother. The interface includes filters for time range, sorting options, and checkboxes for including patents and citations.



www.nist.gov/srd/shop/special-database-catalog

SRD Sorted by Topic

Public Law

SRD Definition

Critical Evaluation Criteria

Number	Title	Price
Special Database 2	NIST Structured Forms Reference Set of Binary Images (SFRS) This database contains 5,590 pages of binary, black-and-white images of synthesized documents such as tax forms. Read More	Free download
Special Database 3	NIST 8-Bit Gray Scale Images of Fingerprint Image Groups	Discontinued
Special Database 4	NIST Handwritten Text Images	Free download
Special Database 5	NIST Handwritten Text Images	Discontinued
Special Database 6	NIST Handwritten Text Images	Discontinued
Special Database 7	NIST Handwritten Text Images	Discontinued
Special Database 8	NIST Handwritten Text Images	Discontinued
Special Database 9	NIST Handwritten Text Images	Discontinued
Special Database 10	NIST Handwritten Text Images	Discontinued
Special Database 11	NIST Handwritten Text Images	Free download
Special Database 12	NIST Handwritten Text Images	Free download
Special Database 13	NIST Handwritten Text Images	Free download
Special Database 14	NIST Handwritten Text Images	Free download
Special Database 15	NIST Handwritten Text Images	Free download
Special Database 16	NIST Handwritten Text Images	Free download
Special Database 17	NIST Handwritten Text Images	Free download
Special Database 18	NIST Handwritten Text Images	Free download
Special Database 19	NIST Handwritten Forms and Characters Handprinted Sample Forms from 3600 writers, including digits and upper and lower case letters, are	Free download

Discontinued



“It has been determined that this dataset lacks the documentation required by NIST for distribution.”

Special
Database
27



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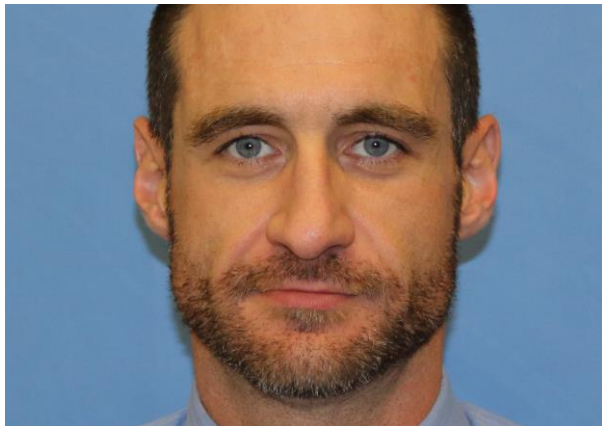
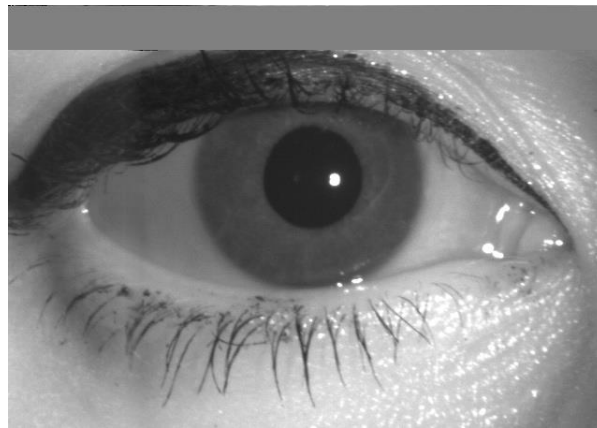
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NIST Fingerprint
Public Data



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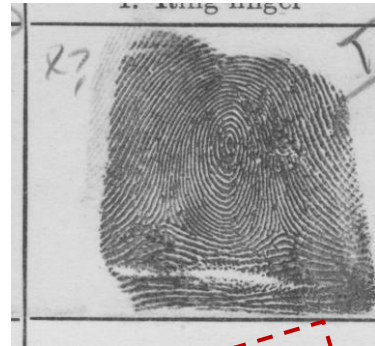
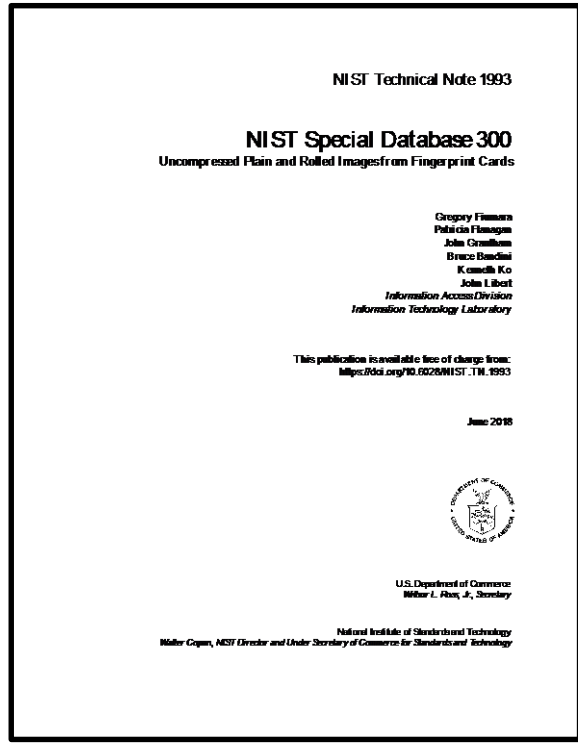
NIST SPECIAL DATABASE

SERIES 300



SPECIAL DATABASE 300

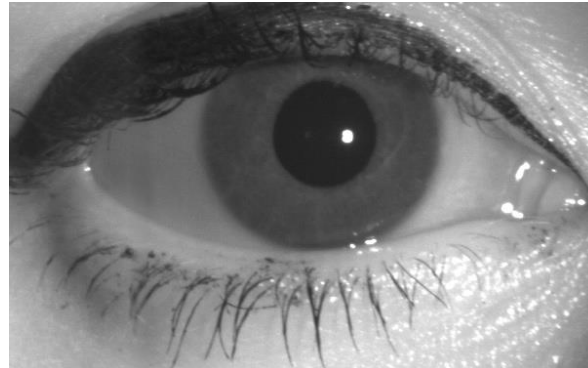
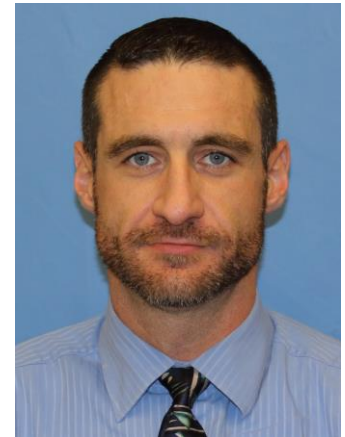
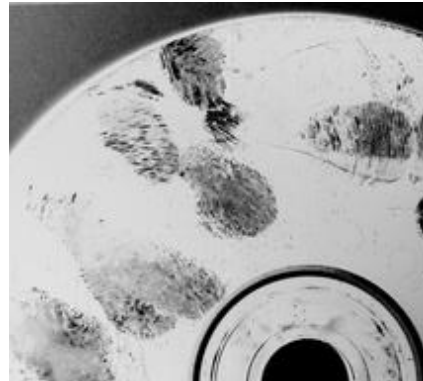
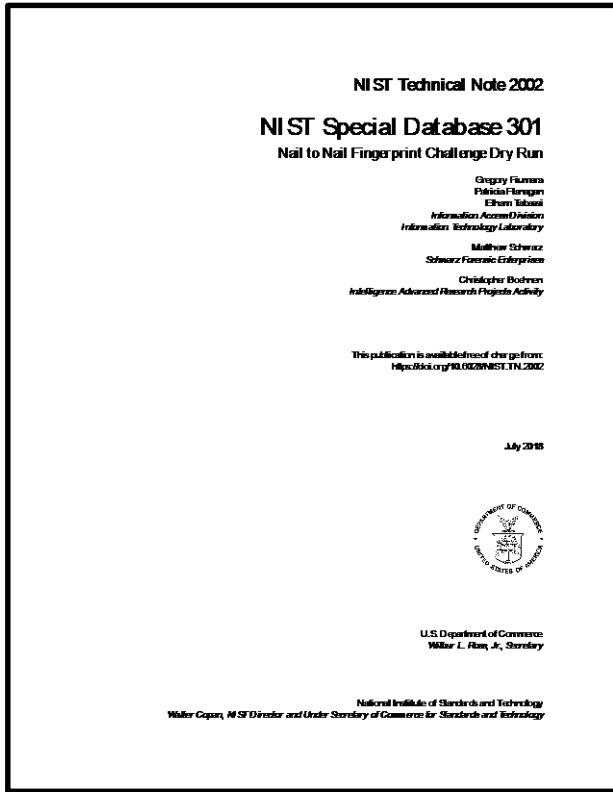
Uncompressed plain and rolled fingerprint images from ink cards





SPECIAL DATABASE 301

IARPA Nail to Nail Fingerprint Challenge “Dry Run”





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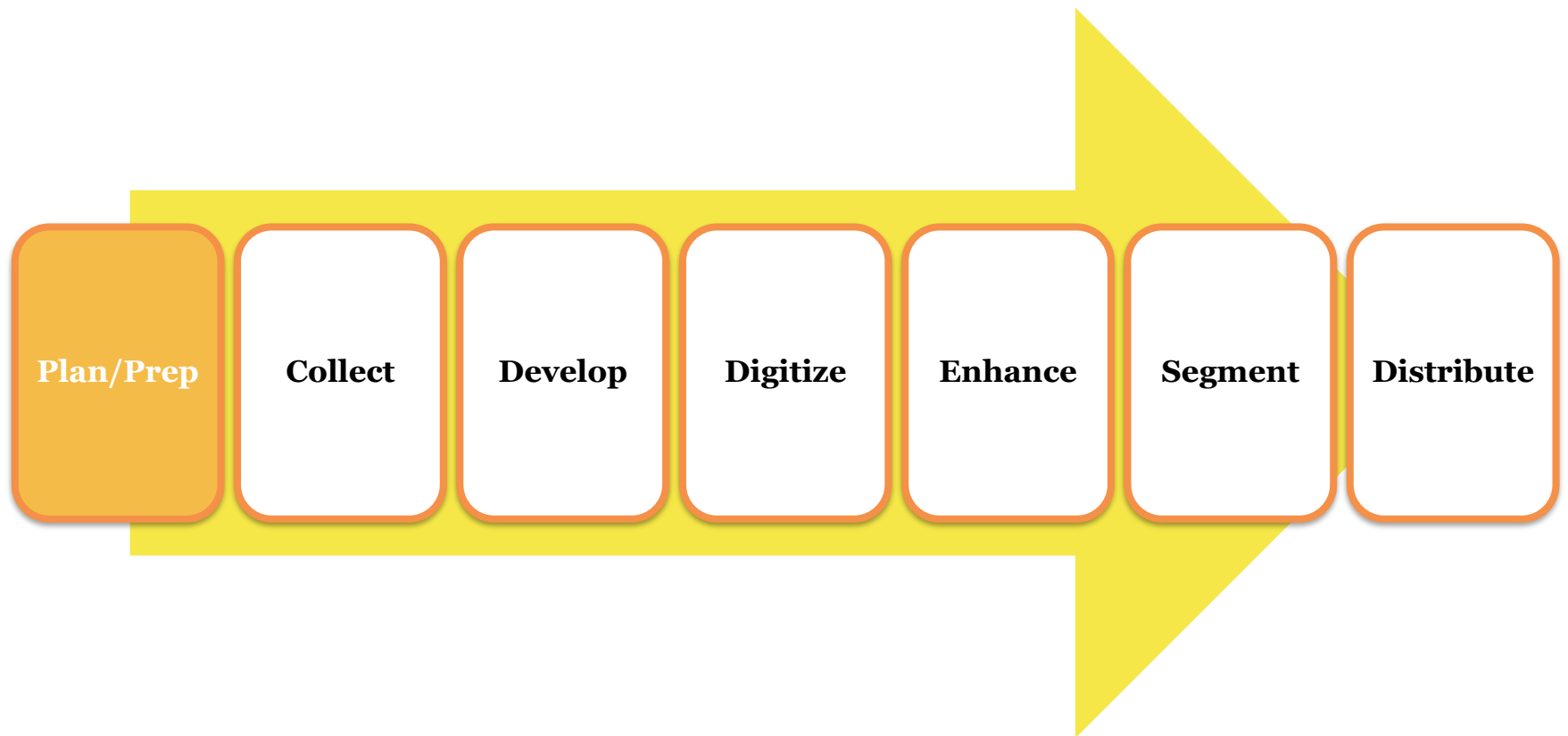
N2N

CHALLENGE

SPECIAL DATABASE 302



Latent Dataset Lifecycle





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INSPIRATION HUT - 1.6CM RULED

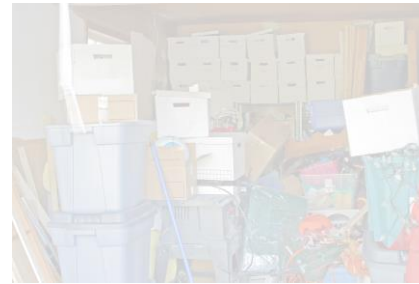




Time



Cost



Space



Realism

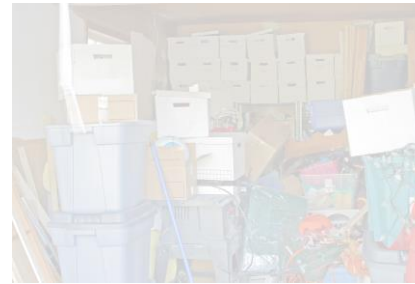
Collection Constraints



Time



Cost



Space



Realism

Collection Constraints



Time



Cost



Space



Realism

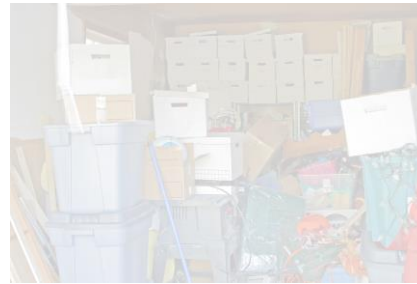
Collection Constraints



Time



Cost



Space



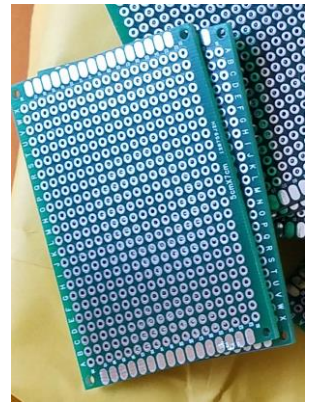
Realism

Collection Constraints



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Latent Kits



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Plan/Prep

Collect

Develop

Digitize

Enhance

Segment

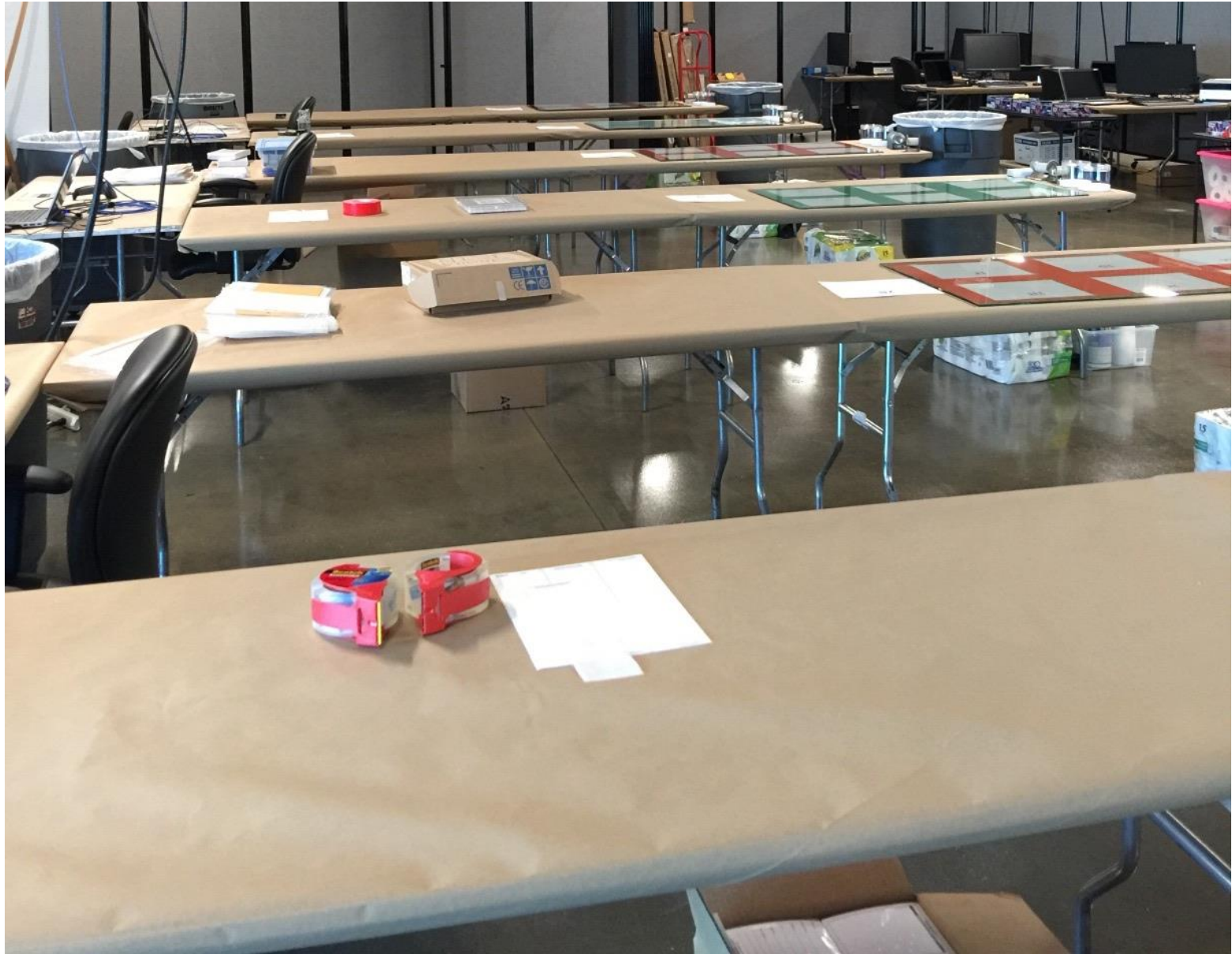
Distribute





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FORENSICS @ NIST

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FORENSICS @ NIST

#NISTForensics

Plan/Prep

Collect

Develop

Digitize

Enhance

Segment

Distribute





FORENSICS @ NIST

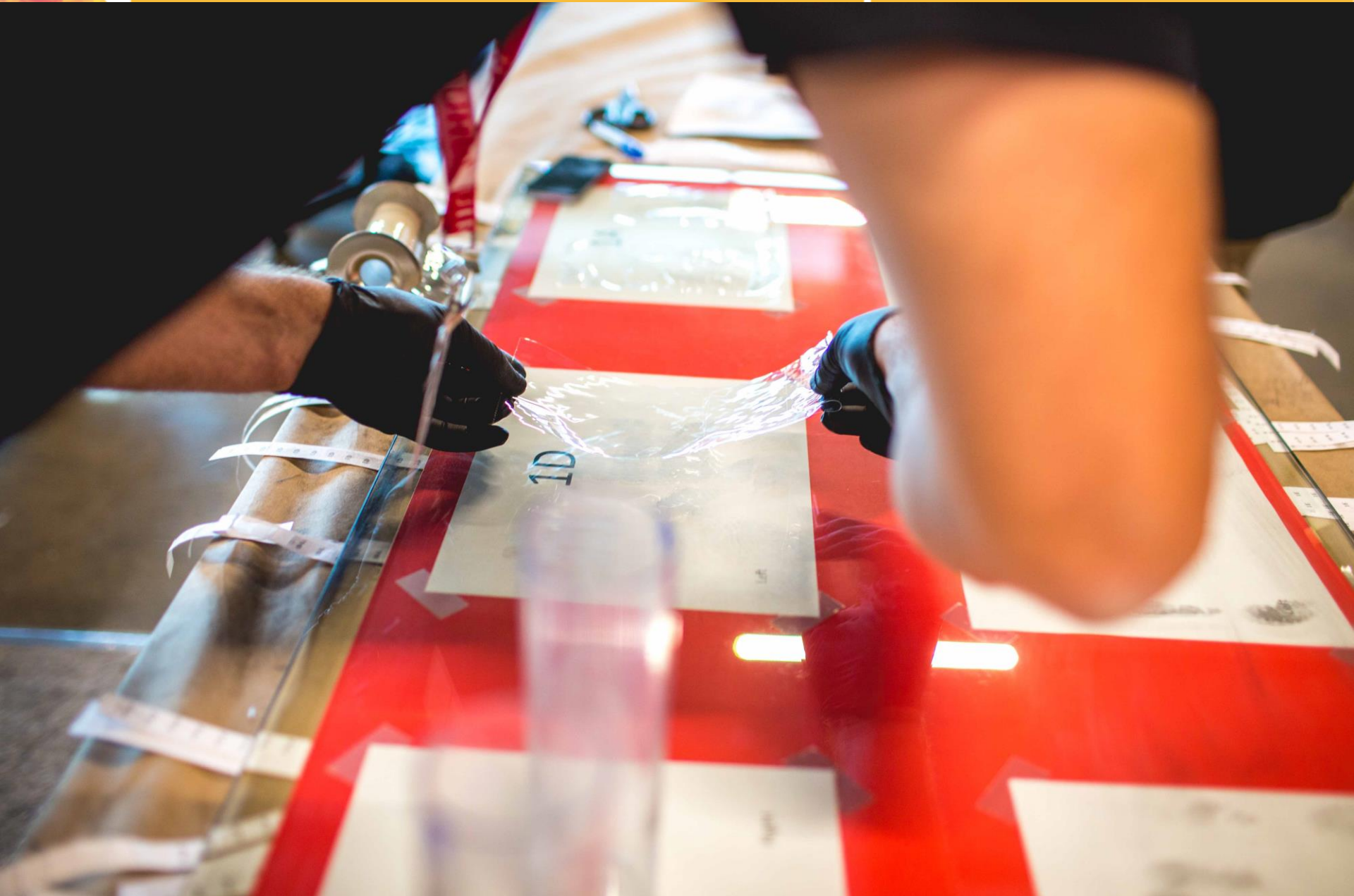
#NISTForensics





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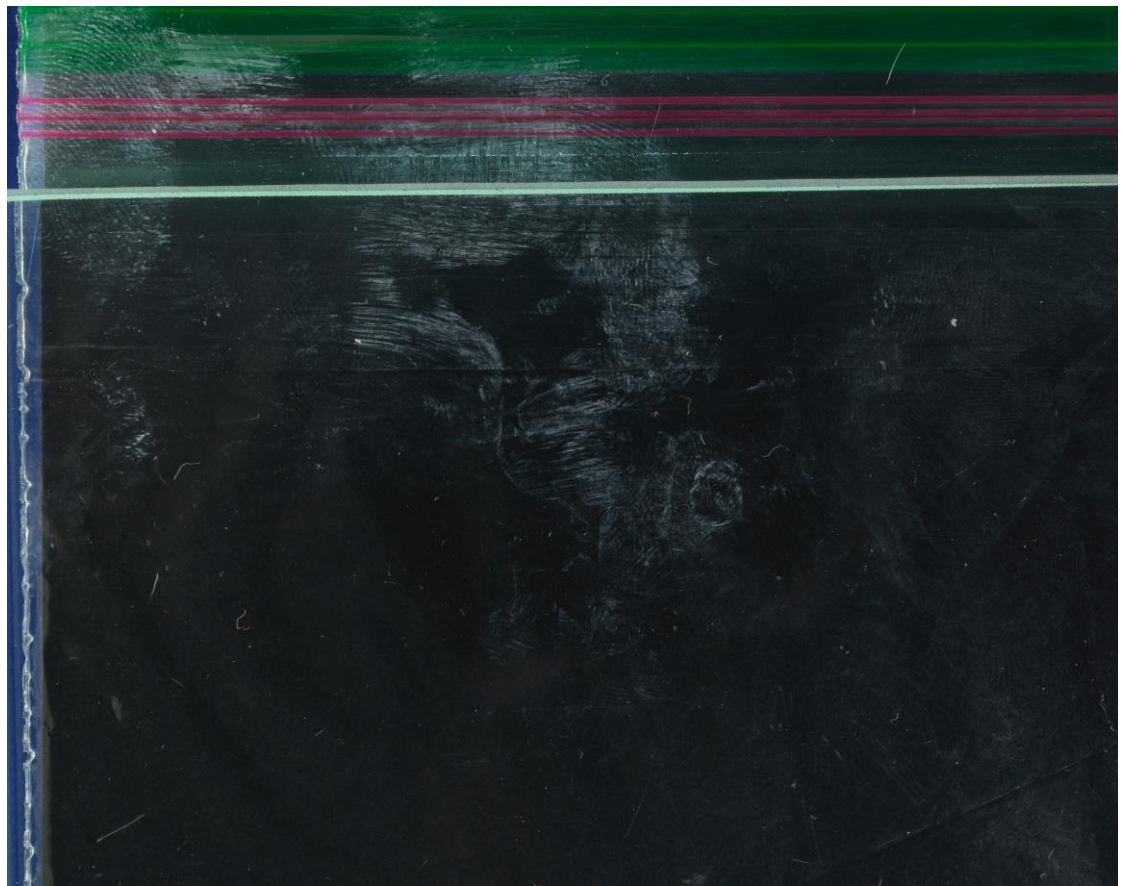
#NISTForensics





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#NISTForensics







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#NISTForensics

Plan/Prep

Collect

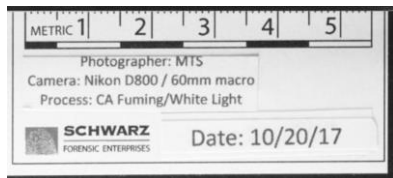
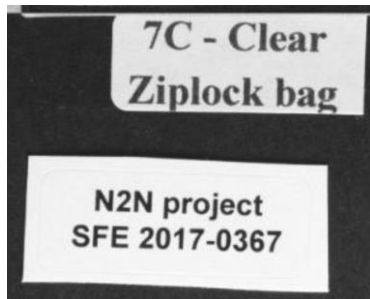
Develop

Digitize

Enhance

Segment

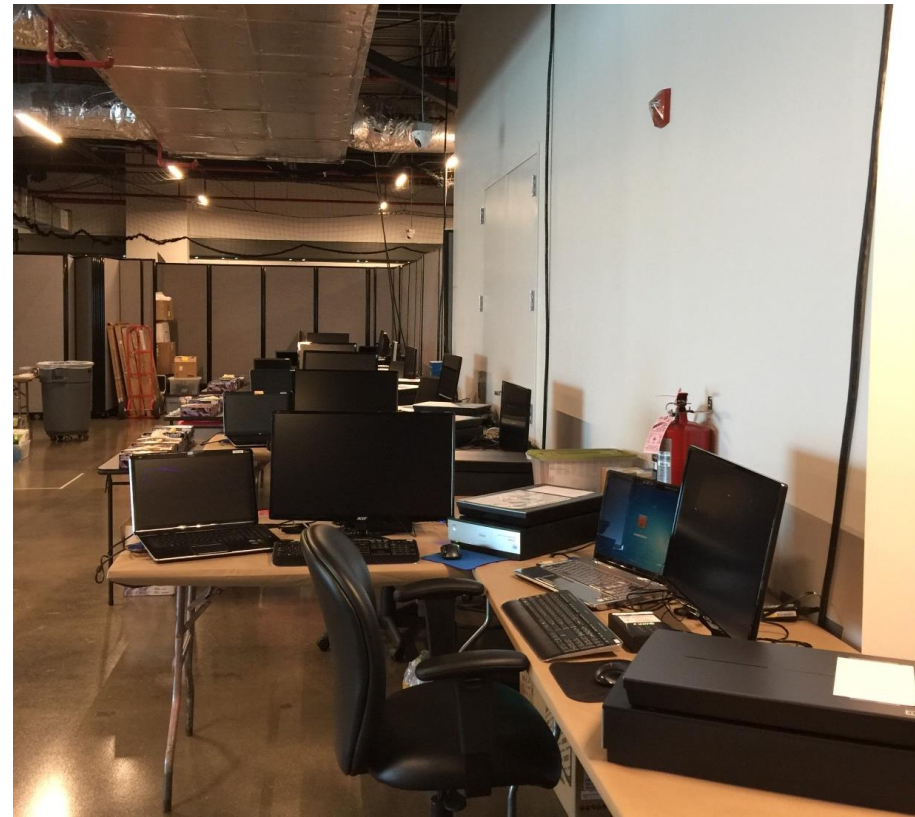
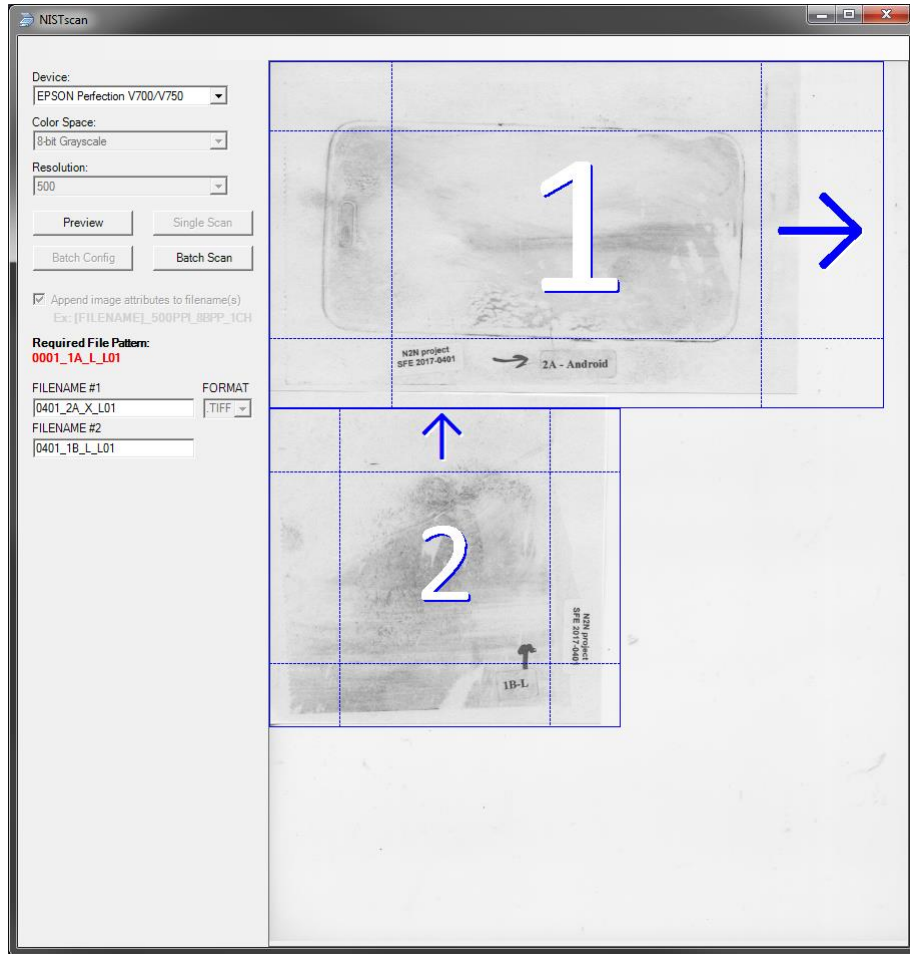
Distribute





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<https://github.com/usnistgov/nistscan>



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Plan/Prep

Collect

Develop

Digitize

Enhance

Segment

Distribute

The screenshot displays the Adobe Camera Raw 9.8 interface for a Nikon D800 image. The main canvas shows a heavily color-corrected image with a dominant orange and yellow hue. The right-hand panel is set to the 'Basic' tab, showing the following settings:

- White Balance: As Shot
- Temperature: 4500
- Tint: +3
- Exposure: 0.00
- Contrast: 0
- Highlights: 0
- Shadows: 0
- Whites: 0
- Blacks: 0
- Clarity: 0
- Vibrance: 0
- Saturation: 0

The histogram at the top right shows a distribution of colors, with a prominent peak in the red and green channels. The bottom status bar indicates the image is in Adobe RGB (1998) color space, 16-bit, 4912 by 7360 (36.3MP), 300 dpi. The bottom right corner shows 'Open Image', 'Cancel', and 'Done' buttons.

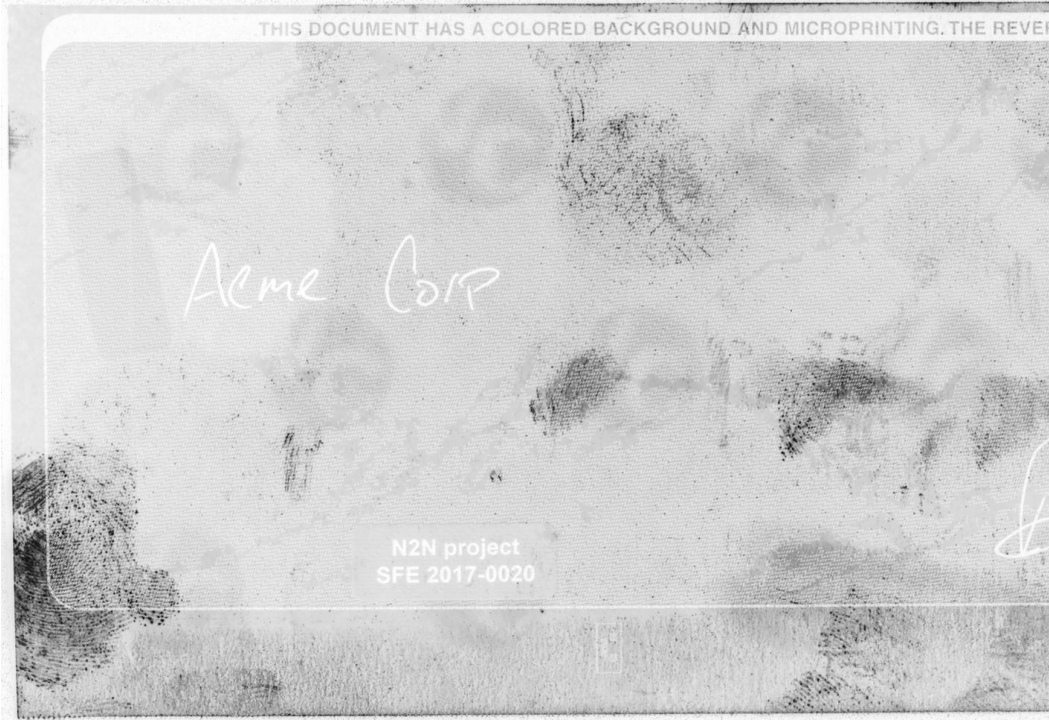


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THIS DOCUMENT HAS A COLORED BACKGROUND AND MICROPRINTING. THE REVERSE





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#NISTForensics

Plan/Prep

Collect

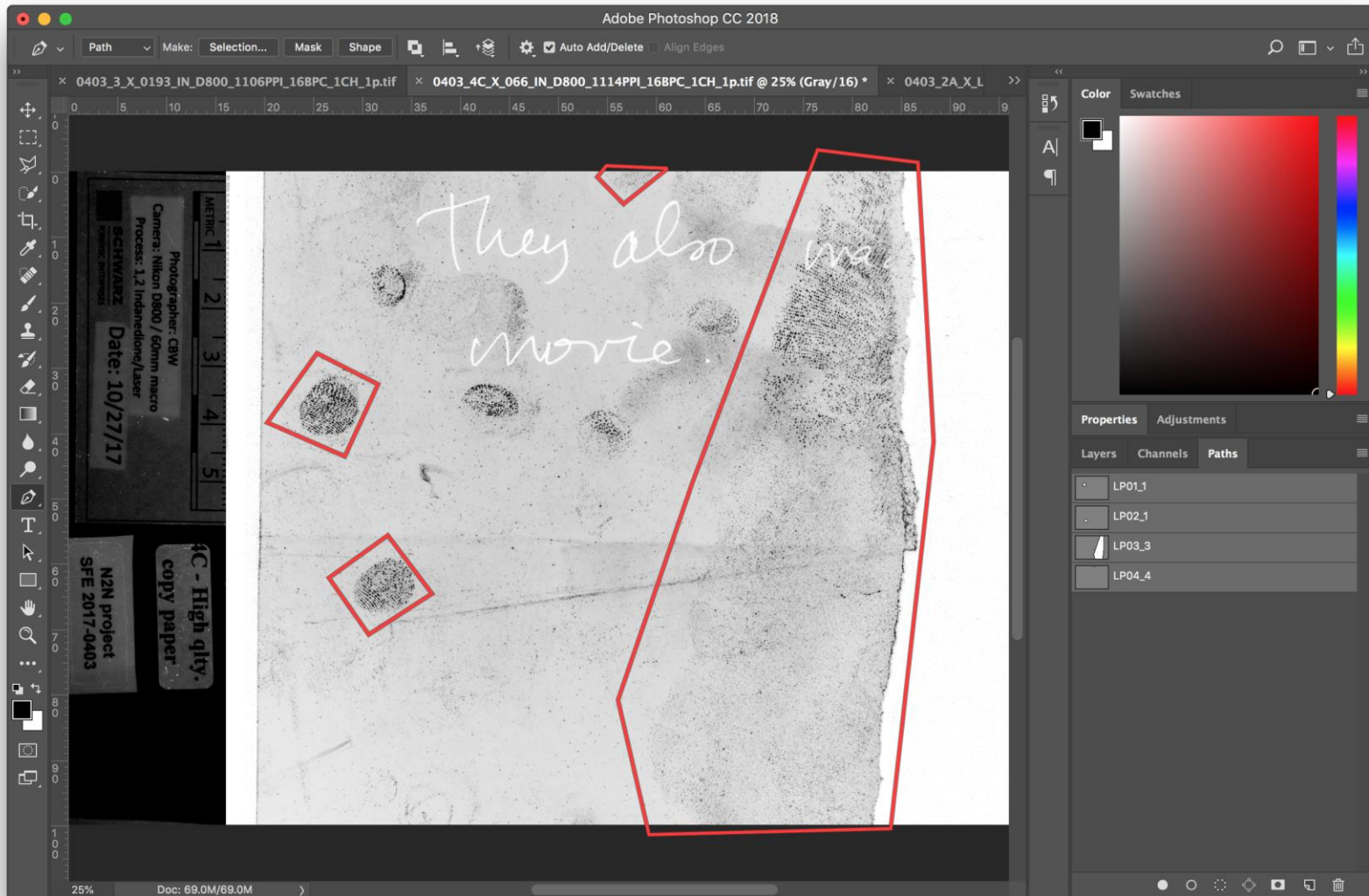
Develop

Digitize

Enhance

Segment

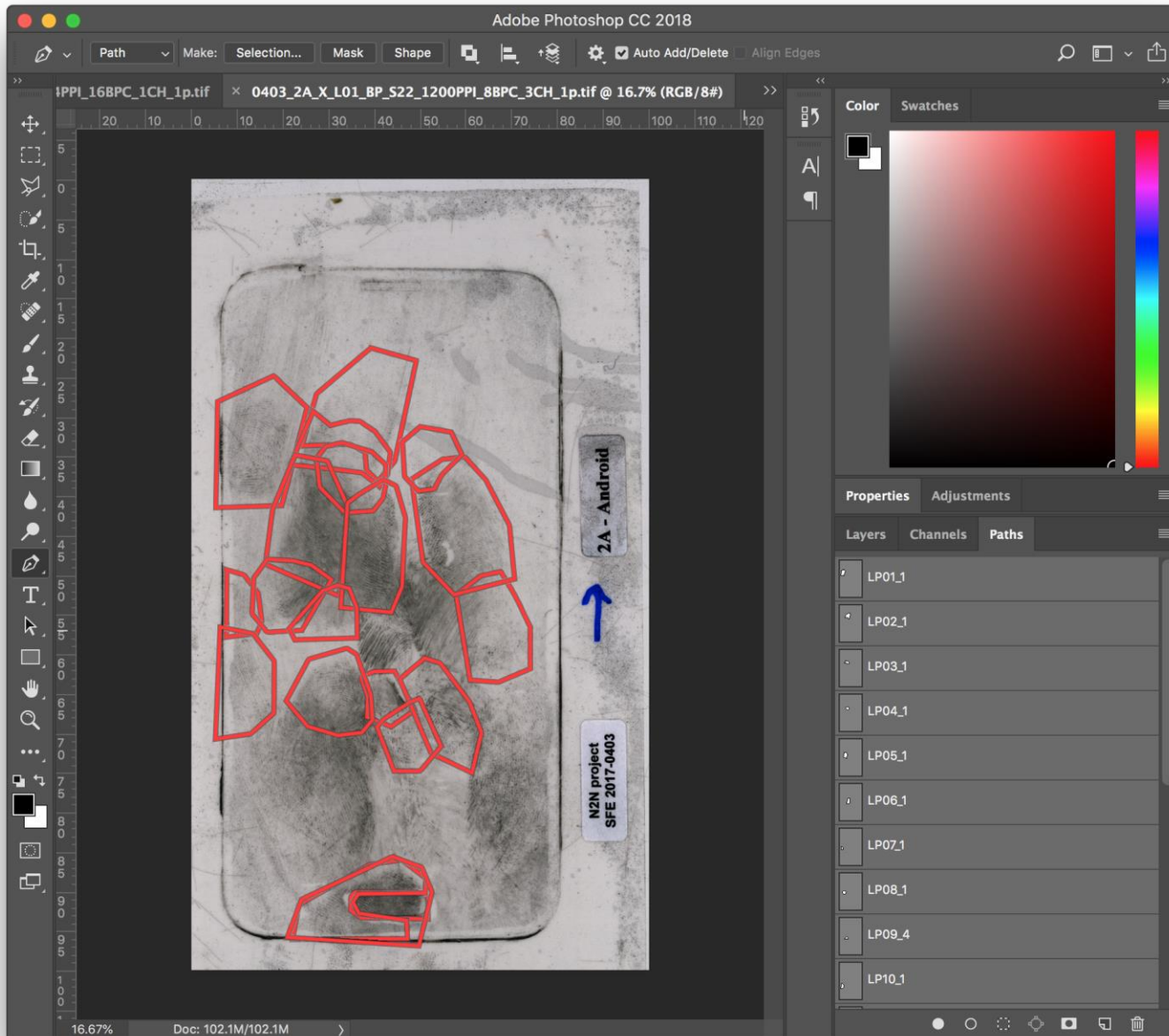
Distribute





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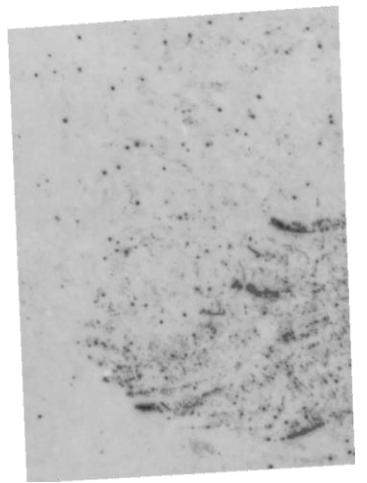
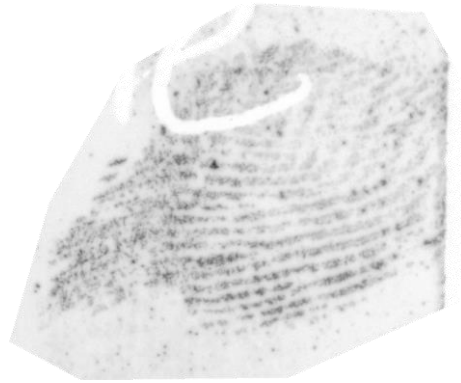
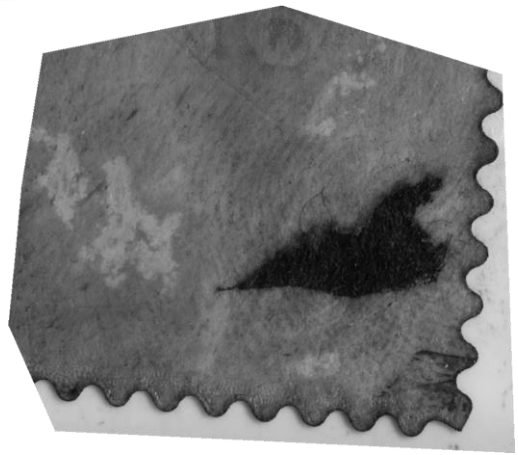
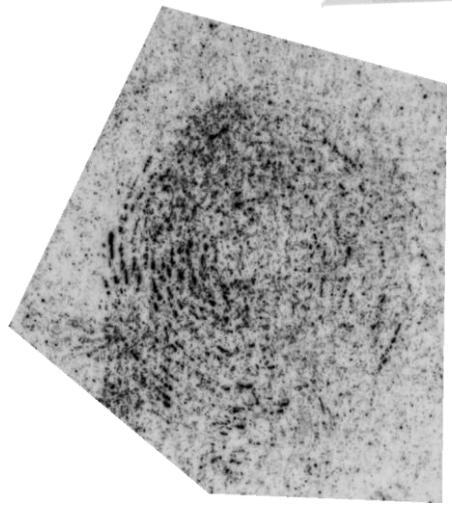
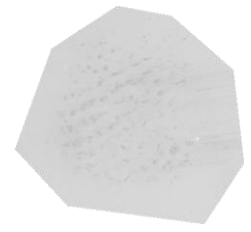
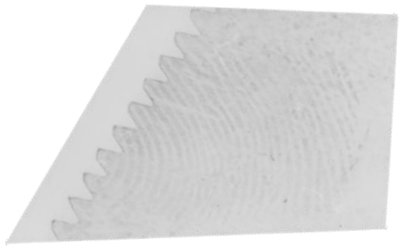
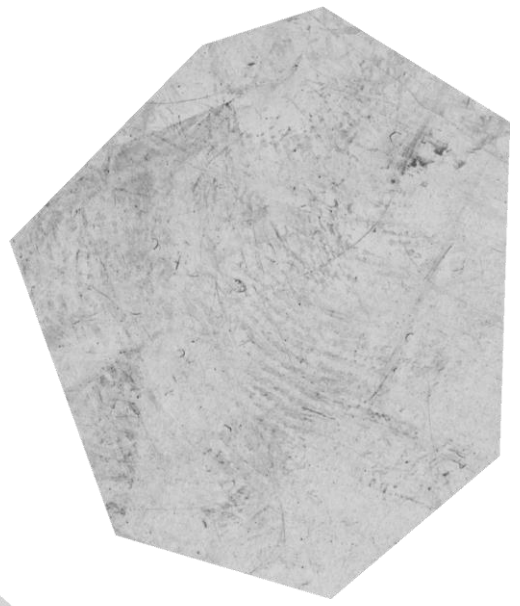
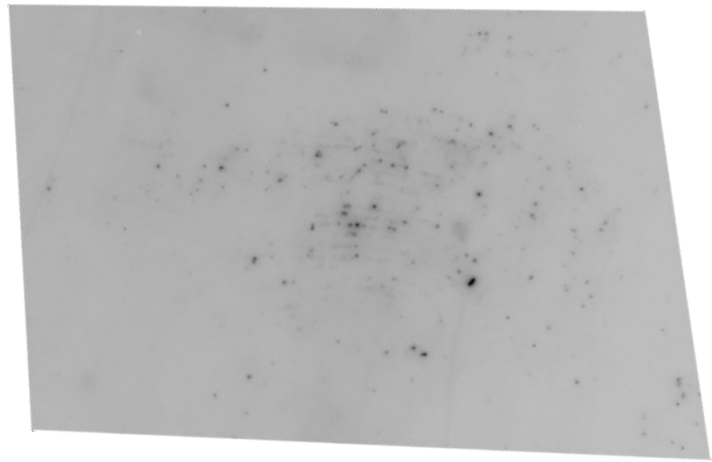
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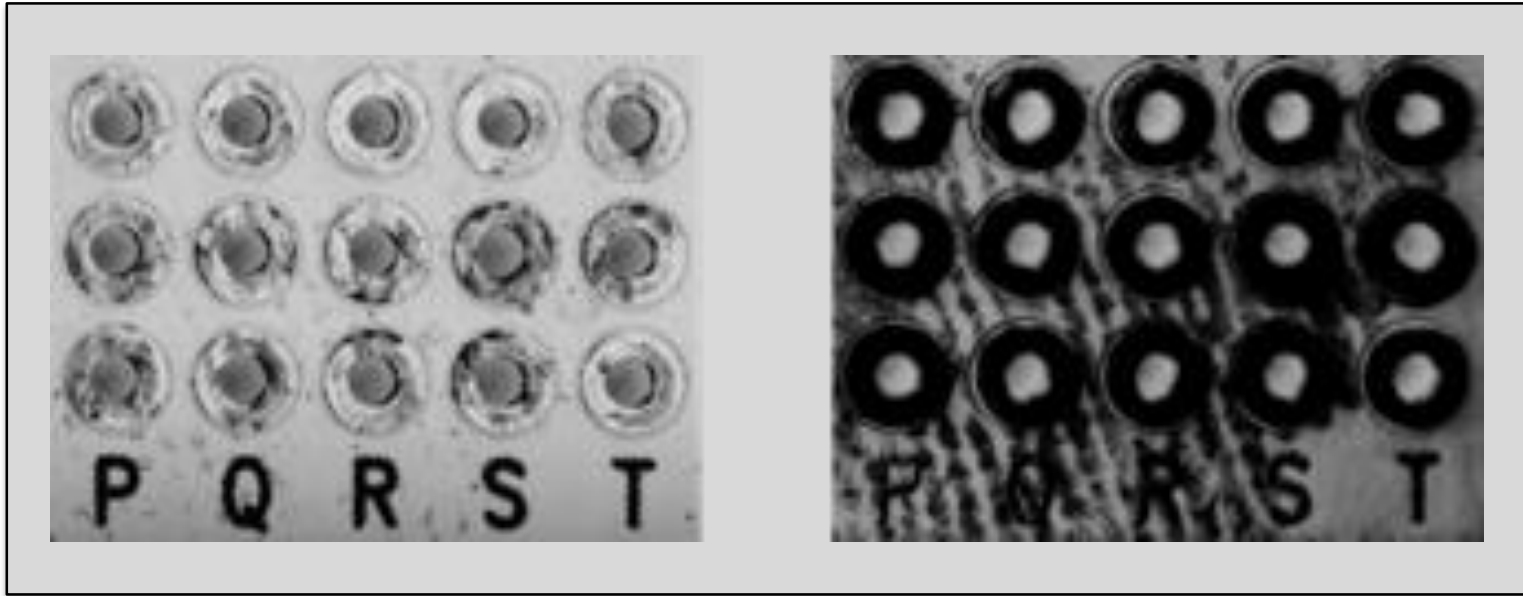
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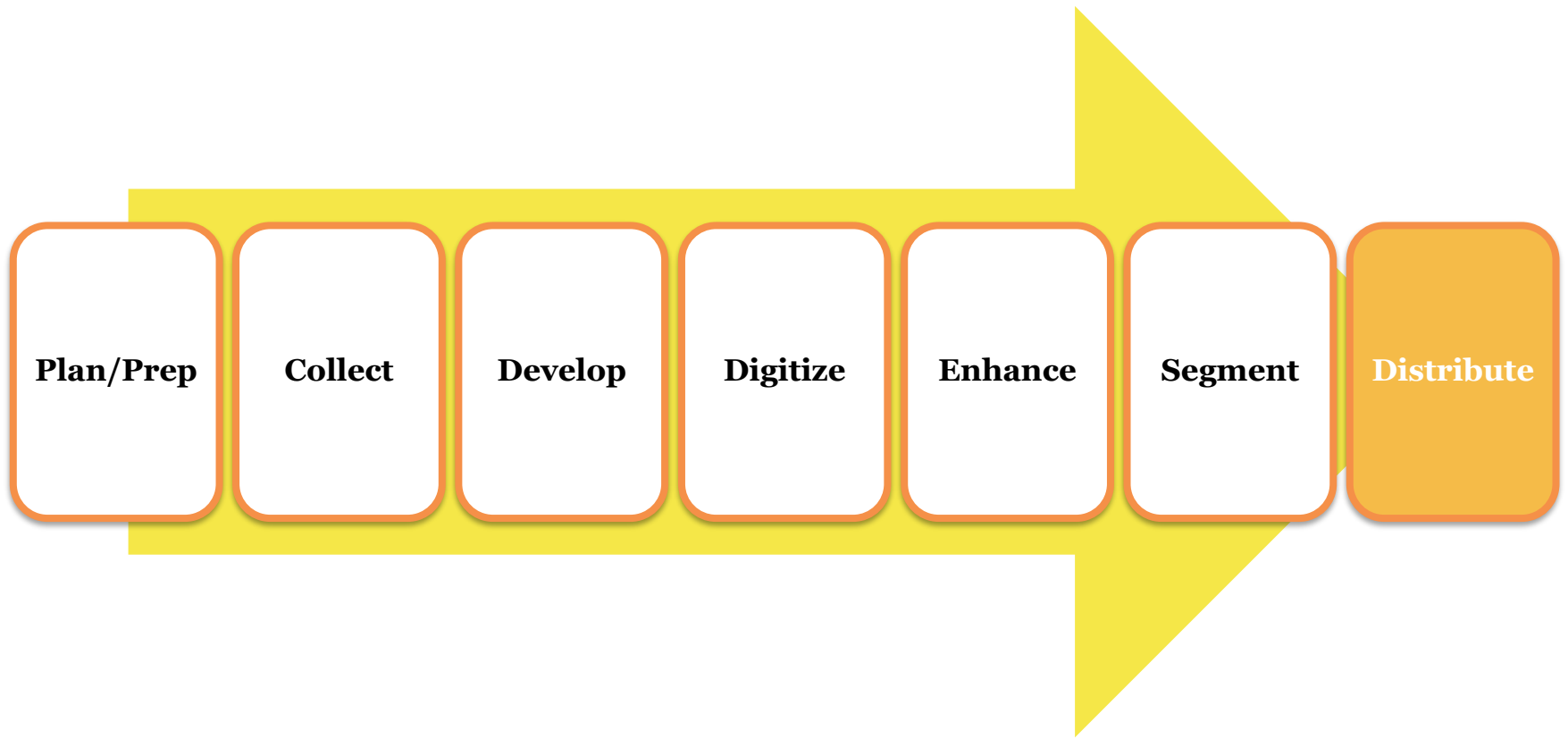
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Latent Dataset Lifecycle






Fool me once...

- Human Subjects Protection
 - Institutional Review Board
 - Chief counsel review
 - SP 800-30 Privacy Risk Assessment Methodology

 - DoC Privacy Program
 - Privacy Threshold Analysis
 - Privacy Impact Assessment
 - SP 800-53 Rev 4 Appendix J Privacy Controls

 - ...and more*
- 



Latent Dataset Lifecycle

