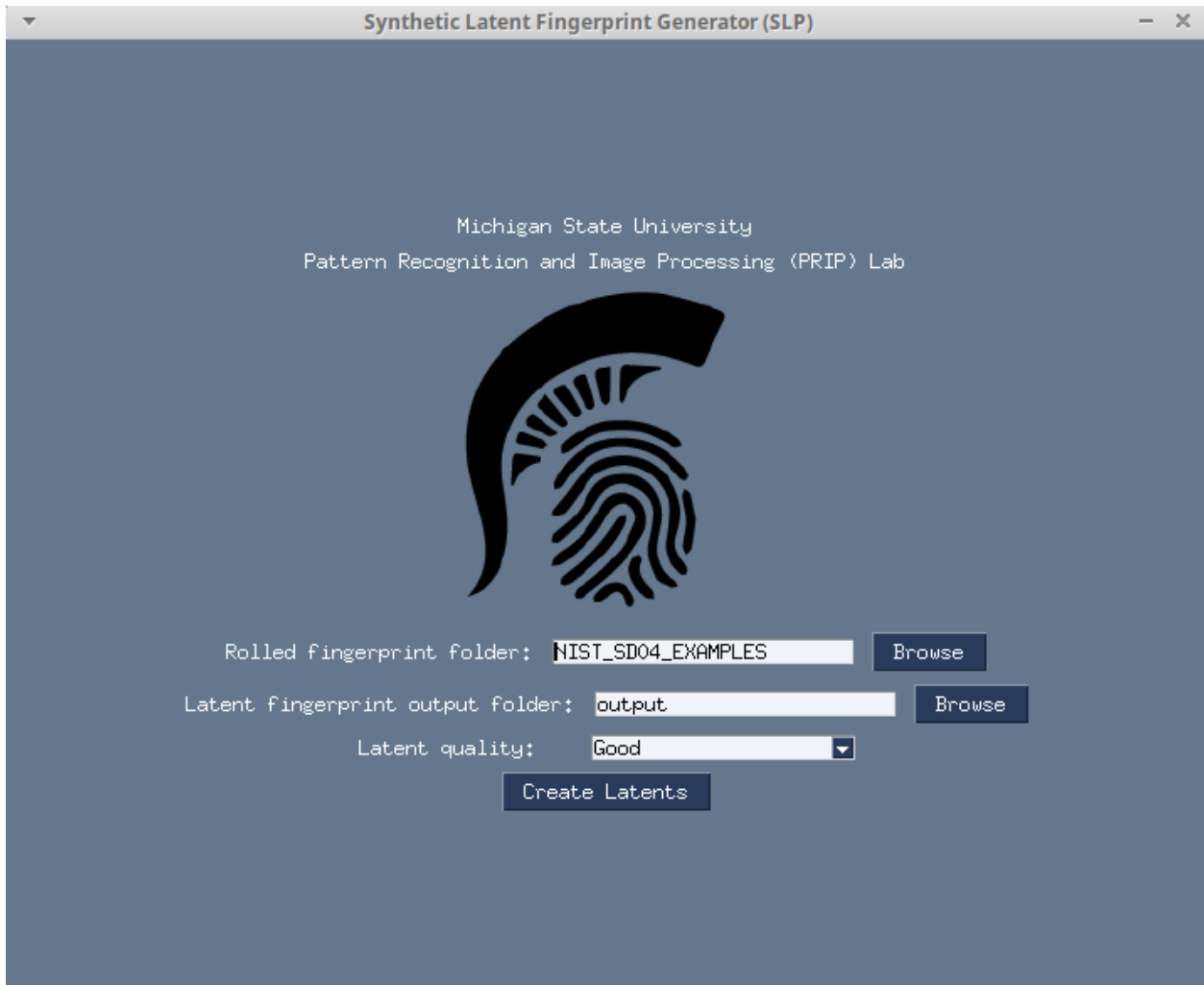


## SYNTHETIC LATENT FINGERPRINT GENERATOR

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- **Conda users:** create a new Conda environment using `conda env create -f environment.yml`
- Running the user interface app: With your conda environment activated, run `python UI.py`
- Running in the terminal: `python test.py <rolled folder> <output folder> <quality>`. The quality options are: Good, Bad, or Ugly. Example:
  - `python test.py NIST_SD04_EXAMPLES/ output/ Good`
- If you run through the user interface app, fill in the fields in the below image and press the "Create Latents" button. By default, example images from NIST SD04 are already loaded, and the latents will be saved in the "output" directory.



The screenshot shows a web-based user interface for the Synthetic Latent Fingerprint Generator (SLP). The interface has a dark blue background. At the top, it says "Michigan State University" and "Pattern Recognition and Image Processing (PRIP) Lab". In the center is a logo featuring a stylized fingerprint with a black silhouette of a person's head and shoulders above it. Below the logo, there are three input fields: "Rolled fingerprint folder:" with the value "NIST\_SD04\_EXAMPLES", "Latent fingerprint output folder:" with the value "output", and "Latent quality:" with a dropdown menu set to "Good". Each input field has a "Browse" button to its right. At the bottom center is a "Create Latents" button.

Synthetic Latent Fingerprint Generator (SLP)

Michigan State University  
Pattern Recognition and Image Processing (PRIP) Lab

Rolled fingerprint folder:

Latent fingerprint output folder:

Latent quality: