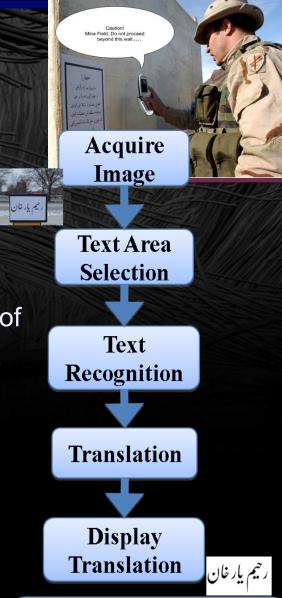
MDRP: Mobile Imaging, Rosetta Phone, and Light-Weight Visual Analytics for In-Field Analytics

- Personnel: Mireille Boutin
- External Partners: Next Wave Systems
- Goal Enable an individual with no prior knowledge of a foreign languages to translate foreign text, in real time, with no network connection

• Approach:

- Develop real-time, light-weight software
 - Deploy on commercially available, hand-held devices equipped with built-in cameras
 - Network connection not needed
- Challenges: computational and memory limitations, built-in camera with low light and heavy noise



Transliteration: Rahim Yaar Khan Translation: Rahim Yaar Khan Context: Town name Spoken text in original language and English translation of text



MDRP: Mobile Imaging, Rosetta Phone, and Light-Weight Visual Analytics for In-Field Analytics

Outcomes

- Developed a recognition methodology for languages in various character sets
- Focused on text found in road signs and documents
- Development platforms: Nokia N900, iPhone
- Extend the functionality to European languages and to documents
 - Deliver a set of light-weight tools for domain specific Spanish word recognition
 - Evaluate the performance of these tools



