DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

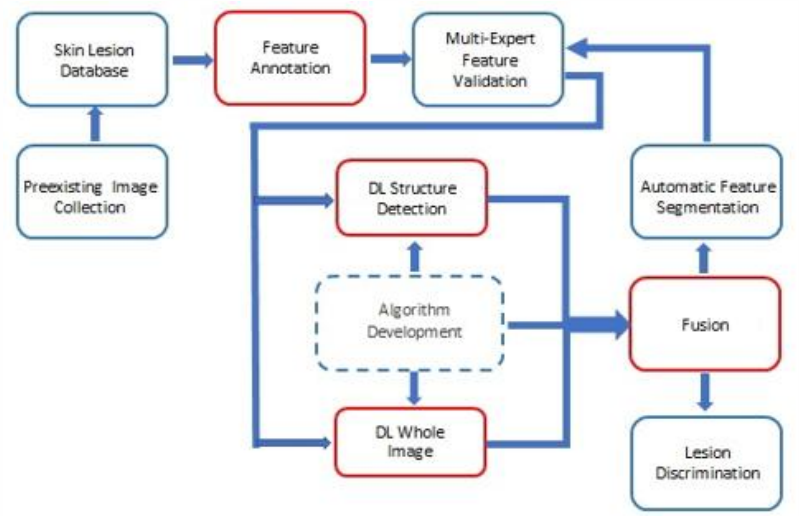
Biomedical Informatics and Pre-college STEM Education

Dermatology skin lesion image analysis

- Skin lesion image archive annotation for expert training and computational algorithm development
- Development of machine and deep learning approaches to detect and segment key lesion features
- Exploration of computational intelligence and data fusion techniques for clinical and dermoscopy skin lesion image discrimination

Longitudinal study of Missouri S&T student development for students with precollege Project Lead The Way STEM program exposure

- Student assessment of career choices, academic performance, retention and precollege backgrounds



Skin lesion image annotation archive curation for skin lesion analysis.

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- National Library of Medicine
- National Science Foundation

Keywords

- Image and signal processing, data fusion, computational intelligence, pre-college engineering education

Recognitions

- IEEE-USA Professional Achievement Award for "sustained contributions to pre-university engineering education"
- IEEE-Eta Kappa Nu C. Holmes MacDonald Outstanding Teaching Award