IDEATION PHASE LITERATURE SURVEY

|  |  |
| --- | --- |
| DATE | 24 SEPTEMBER 2022 |
| TEAM ID | PNT2022TMID41426 |
| PROJECT NAME | AI Based localization of skin disease with  Erythema |

Literature Survey:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.no** | **TITLE&AUTHORS** | **YEAR** | **TECHNIQUE** | **PROPOSED SYSTEM** |
| 1. | Deep Learning Skin Lesion Classification & K Scott Mader | 2019 | Deep learning | The goal is to make a simple model that can go from an image (taken with a smartphone) to a prediction of how likely different  skin-conditions are  based on a picture of your skin. |
| **2.** | Multiclass Skin Lesion Classification Using a Novel | 2022 | EW-FCM  segmentation technique | It explains how the EW and the first- order cumulative |
|  | Lightweight Deep |  |  | moment were |
|  | Learning Framework |  |  | combined to form |
|  | for Smart Healthcare |  |  | the new EW-FCM |
|  | & Long Hoang,Suk- |  |  | segmentation |
|  | Hwan lee,Eung-joo- |  |  | technique and |
|  | lee,Ki-ryong kwon |  |  | maintain their good |
|  |  |  |  | characteristics |
|  |  |  |  | in introduces the |
|  |  |  |  | wide-ShuffleNet for |
|  |  |  |  | skin lesion |
|  |  |  |  | classification. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **3.** | Intelligent | 2021 | Machine | It observes |
|  | System for skin |  | Learning | that most of |
|  | disease |  |  | the cases |
|  | prediction using |  |  | remain |
|  | Machine Learning |  |  | unnoticed |
|  | & Ahmed A. |  |  | because of the |
|  | Elngar et al |  |  | lack of better |
|  |  |  |  | medical |
|  |  |  |  | infrastructure |
|  |  |  |  | and facilities. |
|  |  |  |  | Hence it is |
|  |  |  |  | devoted to |
|  |  |  |  | solve this |
|  |  |  |  | challenge. |
| **4.** | Skin Disease | 2019 | Image | It approach to |
|  | Detection & |  | Processing | detect the skin |
|  | Prem J.Patil, |  | Technique | disease based |
|  | J.Buchkule |  |  | on image |
|  |  |  |  | processing .It |
|  |  |  |  | helps to |
|  |  |  |  | proper |
|  |  |  |  | diagnosis of |
|  |  |  |  | affected skin |
|  |  |  |  | portion. |

REFERENCES:

1. Rey-Barroso, L.; Peña-Gutiérrez, S.; Yáñez, C.; Burgos-Fernández, F.J.; Vilaseca, M.; Royo, S. Optical technologies for the improvement of skin cancer diagnosis: A review. *Sensors* **2021**, *21*, 252. [**Google Scholar**] [**[CrossRef](https://doi.org/10.3390/s21010252)**]
2. Hosny, K.M.; Kassem, M.A.; Foaud, M.M. Classification of skin lesions using transfer learning and augmentation with Alex-net. *PLoS*

*ONE* **2019**, *14*, e0217293. [**Google Scholar**] [**[CrossRef](https://doi.org/10.1371/journal.pone.0217293)**] [**[PubMed](https://www.ncbi.nlm.nih.gov/pubmed/31112591)**][**Green Version**]

1. Zicari, R.V.; Ahmed, S.; Amann, J.; Braun, S.A.; Brodersen, J.; Bruneault, F.; Wurth, R. Co-Design of a trustworthy AI System in healthcare: Deep learning based skin lesion classifier. *Front. Hum. Dyn.* **2021**, *3*, 40. [**Google Scholar**] [**[CrossRef](https://doi.org/10.3389/fhumd.2021.688152)**]
2. Mishra, N.; Celebi, M. An overview of melanoma detection in dermoscopy images using image processing and machine learning. *arXiv* **2016**, arXiv:1601.07843. [[**Google Scholar**](https://scholar.google.com/scholar_lookup?title=An%2Boverview%2Bof%2Bmelanoma%2Bdetection%2Bin%2Bdermoscopy%2Bimages%2Busing%2Bimage%2Bprocessing%2Band%2Bmachine%2Blearning&author=Mishra%2C%2BN.&author=Celebi%2C%2BM.&publication_year=2016&journal=arXiv)]
3. World Health Organization. Radiation: Ultraviolet (UV) Radiation and Skin Cancer. Available online: [**https://www.who.int/news-**](https://www.who.int/news-room/questions-and-answers/item/radiation-ultraviolet-)[**room/questions-and-answers/item/radiation-ultraviolet-(uv)-**](https://www.who.int/news-room/questions-and-answers/item/radiation-ultraviolet-)[**radiation-and-skin-**](https://www.who.int/news-room/questions-and-answers/item/radiation-ultraviolet-)[**cancer#:~:text=Currently%2C%20between%202%20and%203,skin**](https://www.who.int/news-room/questions-and-answers/item/radiation-ultraviolet-)

[**%20cancer%20in%20their%20lifetime**](https://www.who.int/news-room/questions-and-answers/item/radiation-ultraviolet-) (accessed on 19 October 2021).

1. Jerant, A.F.; Johnson, J.T.; Sheridan, C.D.; Caffrey, T.J. Early detection and treatment of skin cancer. *Am. Fam. Physician* **2000**, *62*, 357–368. [[**Google Scholar**](https://scholar.google.com/scholar_lookup?title=Early%2Bdetection%2Band%2Btreatment%2Bof%2Bskin%2Bcancer&author=Jerant%2C%2BA.F.&author=Johnson%2C%2BJ.T.&author=Sheridan%2C%2BC.D.&author=Caffrey%2C%2BT.J.&publication_year=2000&journal=Am.%2BFam.%2BPhysician&volume=62&pages=357%E2%80%93368)]
2. Trufant, J.; Jones, E. Skin cancer for primary care. In *Common Dermatologic Conditions in Primary Care*; John, J.R., Edward, F.R., Jr., Eds.; Springer: Cham, Switzerland, 2019; pp. 171–208. [[**Google Scholar**](https://scholar.google.com/scholar_lookup?title=Skin%2Bcancer%2Bfor%2Bprimary%2Bcare&author=Trufant%2C%2BJ.&author=Jones%2C%2BE.&publication_year=2019&pages=171%E2%80%93208)]