**2020** **­­Reference Papers:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Paper Title** | **Publi-sher** | **Published Date** | **Authors** | **Remarks** |
| Object Detection and Classification System for Visually Impaired. | **IEEE** | 01/09/2020 | Rashika Joshi, Meenakshi Tripati, Amit Kumar, Manoj Singh Gaur | Used **MobileNetSSD** (SSD -Single Shot Detector)**,** in an embedded system. |
| Robot Eye: Automatic Object Detection and Recognition Using Deep Attention Network to Assist Blind People | **IEEE** | 30/12/2020 | Ervin Yohannes, Paul Lin, Chih-Yang Lin, Timothy K. Shih | Used self-designed model (**DarkNet-53** as the backbone), which gave better results than **YOLO (You Only Look Once) v3**. |
| Real-Time Object Detection for Visually Challenged People | **IEEE** | 19/06/2020 | Sunit Vaidya, Naisha Shah, Niti Shah, Radha Shankarmani | Used **YOLO v3**. |
| An Evaluation of RetinaNet on Indoor Object Detection for Blind and Visually Impaired Persons Assistance Navigation | **Springer** | 23/01/2020 | Mouna Afif, Riadh Ayachi, Yahia Said, Edwige Pissaloux, Mohamed Atri | Used **RetinaNet.** |
| Indoor object detection and recognition for an ICT mobility assistance of visually impaired people. | **Springer** | 22/08/2020 | Mouna Afif, Riadh Ayachi, Edwige Pissaloux, Yahia Said, Mohamed Atri | Used **YOLOv3, DarkNet-53.** |
| Deep Learning based Object Detection and Recognition Framework for the Visually-Impaired | **IEEE** | 23/04/2020 | Swapnil Bhole, Aniket Dhok | Used **PASCAL VOC 2007**  dataset, **SSD, Inception v3** model**.** |
| Assisting the Visually Impaired in Multi-object Scene Description Using OWA-Based Fusion of CNN Models | **Springer** | 29/07/2020 | Haikel Alhichri, Yakoub Bazi, Naif Alajlan | Used **VGG16, SqueezeNet,** Included **OWA** approach (Ordered Weighted Average) |
| Smart Machine Learning System for Blind Assistance | **IEEE** | 09/02/2021 | S. Durgadevi, K. Thirupurasundari, C. Komathi, S. Mithun Balaji | (Have to review…) |
| On Improving Perception for Visually Impaired: Requirements, Research and Practicality | **IEEE** | 10/12/2020 | Otilia Zvoristeanu, Stefan Daniel Achirei, Nicolae Alexandru Botezatu, Robert-Gabriel Lupa, Adrian Burlacu, Simona Caraiman | (Have to review…) |
| Real-time Object Detection using Deep Learning for helping People with Visual Impairments | **IEEE** | 01/02/2020 | Matteo Terreran, Andrea G. Tramontano, Jacobus C. Lock, Stefano Ghidoni, Nicola Bellotto | (Have to review…) |
| Intelligent Navigation System for the Visually Impaired - A Deep Learning Approach | **IEEE** | 23/04/2020 | Deepak Kumar Yadav, Somsankar Mookherji, Joanne Gomes, Siddarth Patil | Used basic **4-Layered Convolutional Neural Network** (CNN), but achieved high accuracy on the dataset used. But the dataset is not sufficient. |
|  |  |  |  |  |

* Object Detection and Classification System for Visually Impaired.
* **Publisher –** IEEE
* **01/09/2020** (2020 International conference on communication and signal processing).
* **Authors –** Rashika Joshi, Meenakshi Tripati, Amit Kumar, Manoj Singh Gaur
* Used **MobileNetSSD** (SSD -Single Shot Detector)**,** in an embedded system.
* Robot Eye: Automatic Object Detection and Recognition Using Deep Attention Network to Assist Blind People
* **Publisher –** IEEE
* **30/12/2020** (2020 International Conference on Pervasive Artificial Intelligence).
* **Authors –** Ervin Yohannes, Paul Lin, Chih-Yang Lin, Timothy K. Shih
* Used self-designed model (**DarkNet-53** as the backbone), which gave better results than **YOLO (You Only Look Once) v3**.
* Real-Time Object Detection for Visually Challenged People
* **Publisher –** IEEE
* **19/06/2020** (2020 4th International Conference on Intelligent Computing and Control Systems)
* **Authors –** Sunit Vaidya, Naisha Shah, Niti Shah, Radha Shankarmani
* Used **YOLO v3**.
* An Evaluation of RetinaNet on Indoor Object Detection for Blind and Visually Impaired Persons Assistance Navigation
* **Publisher –** Springer
* **23/01/2020** (Neural Processing Letters)
* **Authors –** Mouna Afif, Riadh Ayachi, Yahia Said, Edwige Pissaloux, Mohamed Atri
* Used **RetinaNet.**
* Indoor object detection and recognition for an ICT mobility assistance of visually impaired people.
* **Publisher –** Springer
* **22/08/2020** (Multimedia Tools and Applications)
* **Authors –** Mouna Afif, Riadh Ayachi, Edwige Pissaloux, Yahia Said, Mohamed Atri
* Used **YOLOv3, DarkNet-53.**
* Deep Learning based Object Detection and Recognition Framework for the Visually-Impaired
* **Publisher –** IEEE
* **23/04/2020** ([2020 4th International Conference on Computing Methodologies and Communication](https://ieeexplore.ieee.org/xpl/conhome/9070072/proceeding))
* **Authors –** Swapnil Bhole, Aniket Dhok
* Used **PASCAL VOC 2007**  dataset, **SSD, Inception v3** model**.**
* Assisting the Visually Impaired in Multi-object Scene Description Using OWA-Based Fusion of CNN Models
* **Publisher –** Springer
* **29/07/2020** (Arabian Journal for Science and Engineering)
* **Authors –** Haikel Alhichri, Yakoub Bazi, Naif Alajlan
* Used **VGG16, SqueezeNet,** Included **OWA** approach (Ordered Weighted Average)
* Smart Machine Learning System for Blind Assistance
* **Publisher –** IEEE
* **09/02/2021** ([2020 International Conference on Power, Energy, Control and Transmission Systems](https://ieeexplore.ieee.org/xpl/conhome/9336757/proceeding))
* **Authors –** S. Durgadevi, K. Thirupurasundari, C. Komathi, S. Mithun Balaji
* **(Saved for further review)**
* On Improving Perception for Visually Impaired: Requirements, Research and Practicality
* **Publisher –** IEEE
* **10/12/2020** ([2020 International Conference on e-Health and Bioengineering](https://ieeexplore.ieee.org/xpl/conhome/9279433/proceeding))
* **Authors –** Otilia Zvoristeanu, Stefan Daniel Achirei, Nicolae Alexandru Botezatu, Robert-Gabriel Lupa, Adrian Burlacu, Simona Caraiman
* **(Saved for further review)**
* Real-time Object Detection using Deep Learning for helping People with Visual Impairments
* **Publisher –** IEEE
* **01/02/2021** (2020 IEEE 4th International Conference on Image Processing, Applications and Systems)
* **Authors –** Matteo Terreran, Andrea G. Tramontano, Jacobus C. Lock, Stefano Ghidoni, Nicola Bellotto
* **(Saved for futher review)**
* Intelligent Navigation System for the Visually Impaired - A Deep Learning Approach
* **Pubisher –** IEEE
* **23/04/2020** (2020 [Fourth International Conference on Computing Methodologies and Communication](https://ieeexplore.ieee.org/xpl/conhome/9070072/proceeding))
* **Authors –** Deepak Kumar Yadav, Somsankar Mookherji, Joanne Gomes, Siddarth Patil
* Used basic **4-Layered Convolutional Neural Network** (CNN), but achieved high accuracy on the dataset used. But the dataset is not sufficient.