**Previous Works**

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| Paper | Dataset | Algorithm | Accuracy (highest)  (or other metrics) |
| [Detecting Deception from Gaze and Speech Using a Multimodal Attention LSTM-Based Framework](https://www.mdpi.com/2076-3417/11/14/6393) | Bag-of-Lies dataset. | LSTM Networks | 70% |
| [Box of Lies: Multimodal Deception Detection in Dialogues](https://web.eecs.umich.edu/~mihalcea/papers/soldner.naacl19.pdf) | Dataset collected from Jimmy Fallon’s Box of Lies show. | Combining multiple  verbal, non-verbal,  and dialogue feature  sets. | 69% |
| [Bag-Of-Lies: A Multimodal Dataset for Deception Detection](https://openaccess.thecvf.com/content_CVPRW_2019/papers/CV-COPS/Gupta_Bag-Of-Lies_A_Multimodal_Dataset_for_Deception_Detection_CVPRW_2019_paper.pdf) | Bag-of-Lies dataset. | Utilizing Gaze, Audio, Video and EEG Data using SVM, MLP, CNN and KNN to achieve a Multimodal data fusion. | 66% |
| [Lie Detection System](https://docs.google.com/document/d/1EcaShQJ6yRWWV38hjqQk0CrZeO5QML6I0onIV4xM1Lo/edit) | Real-life deception  detection using  court trial videos | 3D-CNN | 80% |
| [High-Level Features for Multimodal Deception Detection in Videos](https://openaccess.thecvf.com/content_CVPRW_2019/papers/CFS/Rill-Garcia_High-Level_Features_for_Multimodal_Deception_Detection_in_Videos_CVPRW_2019_paper.pdf) | Real-life deception  detection using  court trial videos | Hierarchal BSSD and  SVM | 67.5% |
| [Lie Detection using Speech Processing Techniques](https://iopscience.iop.org/article/10.1088/1742-6596/1921/1/012028/pdf) | Real-life deception  detection using  court trial videos | SVM with different kernel functions. | 81% |
| [A Review of Deep Learning-Based Contactless Heart Rate Measurement Methods](https://www.mdpi.com/1424-8220/21/11/3719) | The UBFC database | 3D-CNN and CNN-LSTM | 4.76 MSE (in BPM) |
| [Measuring Heart Rate Variability Using Facial Video](https://www.mdpi.com/1424-8220/22/13/4690) | Manually generated dataset that contains 720p 30fps videos of subject’s faces while having their heart rate measured. | Eulerian Video Magnification Algorithm and MATLAB. | 0.8 ME (in BPM) |
| [Remote Heart Rate Measurement from Highly Compressed Facial Videos: an](https://openaccess.thecvf.com/content_ICCV_2019/html/Yu_Remote_Heart_Rate_Measurement_From_Highly_Compressed_Facial_Videos_An_ICCV_2019_paper.html)  [End-to-end Deep Learning Solution with Video Enhancement](https://openaccess.thecvf.com/content_ICCV_2019/html/Yu_Remote_Heart_Rate_Measurement_From_Highly_Compressed_Facial_Videos_An_ICCV_2019_paper.html) | OBF and MAHNOB-HCI  Datasets | STVEN and rPPGNet | 5.93 RMSE (in BPM) |
| [Analysis of CNN-based remote-PPG to understand limitations and sensitivities](https://opg.optica.org/boe/fulltext.cfm?uri=boe-11-3-1268&id=426664) | HNU and PURE Datasets | CNN | ~ 0-2 RMSE (in BPM)  And ~ 100% Accuracy on RGB videos except for some outliers. |