## HYBRID UWB BASED IMAGING TECHNIQUE FOR BREAST TUMOR DETECTION BY USING ENHANCED ROBUST AND ARTIFACT REMOVAL ALGORITHM

A project report submitted to Jawaharlal Nehru Technological University, Kakinada in the partial fulfilment of the requirements for the award of degree of

### BACHELOR OF TECHNOLOGY

#### In

#### ELECTRONICS AND COMMUNICATION ENGINEERING

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#### **AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

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This is to certify that the project work entitled "HYBRID UWB BASED IMAGING TECHNIQUE FOR BREAST TUMOR DETECTION BY USING ENHANCED ROBUST AND ARTIFACT REMOVAL ALGORITHM" is being submitted for partial fulfillment for the award of Bachelor of Technology in Electronics & Communication Engineering is a bonafide work done by L.REVATHI(16811A0433),K.SUSEELA (16811A0430),M.MANIKANTHA(16811A0438), B.SAMBA SIVA RAO (16811A0409) CH.HEMANAGESWARA RAO(16811A0416) under the guidance during year 2019-2020 and it has been found suitable for according to the requirements of the university.

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EXTERNAL EXAMINER

## ABSTRACT

Breast tumor is the high risk disease among women which often causes life threatening fear . In order to recognize the tumor infected breast image UWB imaging technique is utilized. Thus utilized breast image is preprocessed for eliminating noise and unnecessary data by Adaptive wiener filter and Recursive least square filter . Henceforth pre processed image is given to FDTD for investing the breast image for tumor recognition . Thus obtained image given to RAR algorithm for removal artifact from tumor suspected image. Thus obtained image is made auto correlation for brightening the tumor infected areas. Then the breast images are segmented by edge based tumor segmentation and the results are classified with DAS & DMAS algorithm for better accuracy & sensitivity of image.