

## 2. 英文部份

(KEY WORDS) : Few-shot learning, computer vision, deep learning

Computer vision and digital image processing have different applications in different application fields and automatic production processes. In the textile industry, fabric defect detection is considered to be a challenging task, because the quality and price of any textile product depends on the efficiency and effectiveness of automatic defect detection. In the past, the textile industry used manual detection of defects in the fabric production process. Inattention, human fatigue and time consumption are the main shortcomings related to the manual fabric defect detection process. Applications based on computer vision and digital image processing can solve the above limitations and shortcomings. In the past two decades, various applications based on computer vision have been proposed in various research articles to solve these limitations. In this research plan, we aim to study the computer vision method based on using a small number of flaw samples, and apply it to the textile industry to detect fabric defects.