Accepted Manuscript

Detection and Classification of Cancer in Whole Slide Breast Histopathology Images Using Deep Convolutional Networks

Baris Gecer, Selim Aksoy, Ezgi Mercan, Linda G. Shapiro, Donald L. Weaver, Joann G. Elmore

PII: S0031-3203(18)30257-7
DOI: 10.1016/j.patcog.2018.07.022
Reference: PR 6614

To appear in: *Pattern Recognition*

Received date: 22 August 2017
Revised date: 13 May 2018
Accepted date: 16 July 2018

Please cite this article as: Baris Gecer, Selim Aksoy, Ezgi Mercan, Linda G. Shapiro, Donald L. Weaver, Joann G. Elmore, Detection and Classification of Cancer in Whole Slide Breast Histopathology Images Using Deep Convolutional Networks, *Pattern Recognition* (2018), doi: 10.1016/j.patcog.2018.07.022

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- Commonly studied scenario considers only binary cancer vs. no cancer classification.
- Our system classifies whole slide breast biopsies into five diagnostic categories.
- Pipeline of fully convolutional networks localizes diagnostically relevant regions.
- Convolutional neural network classi

  es detected regions of interest in whole slides.
- Experiments show that our method is compatible with predictions of 45 pathologists.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/6938681

Download Persian Version:

https://daneshyari.com/article/6938681

Daneshyari.com