

UNIVERSITY OF SOUTH FLORIDA

Major Research Area Paper Presentation

*Automated Approaches to Enable Innovative Civic Applications from
Citizen Generated Imagery*

by
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For the Ph.D. degree in Computer Science and Engineering

With the rapid permeance of smart-phone technologies today, citizens are increasingly active in collaborating with public officials for improved quality of life. However, for effective utility, public officials must be empowered with optimal tools that can best leverage citizen participation. In this paper, we present the design and details of computer vision techniques to automatically detect and localize street garbage from citizen generated imagery and analyze the performance of multiple techniques. Our dataset is mined from (citizen-generated) images in the 311 service deployed in San Francisco, which is a service citizens use to report civic issues. Results from our evaluations show that our system can be a vital cog towards next generation smart governance systems geared towards cleaner and healthier neighborhoods. We also present our future work in this space of computer vision techniques to process additional citizen generated data for innovative civic applications.

Thursday, December 9, 2021

9:30 AM EST

Online (MS Teams, link: <https://bit.ly/3cFYleR>)

Please email hsyi@usf.edu for questions

THE PUBLIC IS INVITED

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