

# **Algorithm Developed to Make More Reliable Links to Better Photographic Views of Nursing Homes for Prototype "Nursing Home Screener" Web Site**

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## **Abstract:**

To facilitate screening American nursing homes by location and quality, we are developing a website that uniquely shows multiple homes as rank markers on a Google Map. We want also to see photos of the homes, ones that are more informative than provided by the standard three Views. Our prototype offers a hyperlink to Microsoft Maps Live from each home marker, so that "bird's-eye" views (i.e., moderately close-up "45 degree" aerial views) can be shown if available. Such linking is often unsuccessful in reaching a home's image, due to format mismatch of either the home name or address between the two mapping systems. We have developed a preprocessing algorithm that recognizes such a failure and attempts to overcome it. If a reliable link is found, it then detects whether a bird's-eye view is available. (If not, the hyperlink is suppressible.) Four types of unsuccessful links are detected: "Blank", "Pink Box", "Yellow Box", and "Multiple Addresses". We present the nature of each failure type, our solutions, and the degree of improvement found. How we determine bird's-eye availability is described, and the coverage of bird's-eyes for all US homes estimated. Finally, open issues and further research are discussed.