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Author: Xiaonan Liu, Kewei Chen, Teresa Wu, David Weidman, Fleming Lure, Jing Li

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## Use of Multi-Modality Imaging and Artificial Intelligence for Diagnosis and Prognosis of Early Stages of Alzheimer's Disease

Xiaonan Liu<sup>a</sup>, Kewei Chen<sup>b</sup>, Teresa Wu<sup>a</sup>, David Weidman<sup>b</sup>, Fleming Lure<sup>c</sup>, Jing Li<sup>a</sup>

<sup>a</sup>School of Computing, Informatics and Decision Systems Engineering, Arizona State University, 699 S Mill Avenue, Tempe, AZ, 85281, USA

<sup>b</sup>Banner Alzheimer's Institute, 901 E Willetta St, Phoenix, AZ, 85006, USA

<sup>c</sup>MS Technologies Corp, 10110 Molecular Dr. # 305, Rockville, MD 20850, USA

Email addresses:

Xiaonan Liu<sup>a</sup>: [xliu203@asu.edu](mailto:xliu203@asu.edu)

Kewei Chen<sup>b</sup>: [Kewei.Chen@bannerhealth.com](mailto:Kewei.Chen@bannerhealth.com)

Teresa Wu<sup>a</sup>: [Teresa.Wu@asu.edu](mailto:Teresa.Wu@asu.edu)

David Weidman<sup>b</sup>: [David.Weidman@bannerhealth.com](mailto:David.Weidman@bannerhealth.com)

Fleming Lure<sup>c</sup>: [Fleming.Lure@mstechnologies.com](mailto:Fleming.Lure@mstechnologies.com)

Jing Li<sup>a</sup>: [jing.li.8@asu.edu](mailto:jing.li.8@asu.edu)

### Corresponding Author:

Jing Li, Associate Professor  
Arizona State University  
699 S Mill Avenue, Tempe, AZ, 85281, USA  
Tel: 1-480-584-7516  
Email: [jing.li.8@asu.edu](mailto:jing.li.8@asu.edu)

**Running head:** Multi-modality imaging and AI for early stages of AD

### Abbreviations:

AD: Alzheimer's disease  
MCI: mild cognitive impairment  
MRI: magnetic resonance imaging;  
FDG: fluorodeoxyglucose;  
PET: positron emission topography;  
FDA: food and drug administration;  
NIA: national institute of aging;  
AA: Alzheimer's association;  
IWG: international working group;  
ML: machine learning;  
AI: artificial intelligence;  
NC: normal control;  
CSF: cerebrospinal fluid;  
SNAP: suspected non-Alzheimer pathology;  
SVDs: singular vector decompositions;  
SUVRs: standard uptake value ratios;  
SVM: support vector machine;  
ICA: independent component analysis;  
MKL: multiple kernel learning;  
ROI: region of interest;  
ADNI: Alzheimer's disease Neuroimaging Initiative;

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