JUNRUI DI

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STATISTICAL METHODS RESEARCH INTERESTS

feature engineering for wearable devices, matrix and tensor decompositions, dimension reduction, functional data analysis.

SCIENTIFIC RESEARCH INTERESTS

wearable computing and its applications in public health (e.g. mental health and aging), physical activity assessment, sleep, circadian rhythm, gerontological epidemiology.

EDUCATION

Johns Hopkins Bloomberg School of Public Health

Ph.D, Biostatistics

Advisor: Vadim Zipunnikov, Ph.D.

Georgetown University

Dec 2013

Expected: May 2019

M.S., Biostatistics

Thesis: Robust Integrative Analysis of Multi-Block Contaminated Datasets

Advisor: Valeriy Korostyshevskiy, Ph.D.

University of California, Berkeley

May 2012

B.A. Applied Mathematics

High Distinction General Scholarship (roughly equivalent to Magna Cum Laude)

EXPERIENCE

Research Assistant

Jun 2015 - Present

Johns Hopkins Bloomberg School of Public Health

Baltimore, MD

Advisor: Vadim Zipunnikov, Ph.D.

Co-Investigator

May 2013 - Apr 2014

Multicenter AIDS Cohort Study

Washington, DC

Advisor: Michael Plankey, Ph.D.

Research Assistant

Sep 2012 - May 2013

Georgetown University

Washington, DC

Advisor: George Luta, Ph.D. and Valeriy Korostyshevskiy, Ph.D.

PUBLICATIONS

Published / In Press

1. **Di**, J., Li, Y., Friedman, MR., Reddy, S., Surkan, PJ., Shoptaw, S., and Plankey, M.. Determining Survey Satisficing of Online Longitudinal Survey Data in the Multicenter AIDS Cohort Study using a Group-Based Trajectory Analysis. *Journal of Medical Internet Research Public Health and Surveillance*. 2016; 2(2): e150.

2. Varma, V., Dey D., Leroux A., **Di**, **J.**, Urbanek, J., and Zipunnikov, V.. Re-evaluating the effect of age on physical activity over the lifespan. Accepted by *Preventive Medicine*.

Under Review / Revision

- 3. Zipunnikov, V., Dey, D., Leroux, A., **Di, J.**, Urbanek, J., Harris, T., and Crainiceanu, C.. Objectively measured late-morning physical activity predicts mortality in the NHANES 2003-2006 cohorts. Resubmitted to *PLOS One* after revision.
- 4. **Di**, J., Leroux, A., Urbanek, J., Spira, A., Schrack, J., and Zipunnikov, V.. Methods to quantify fragmentation of accelerometry-measured physical activity. Under review *Medicine & Science in Sports & Exercise*.
- 5. Johns, J., **Di, J.**, Zipunnikov, V., Swendsen, J., Merikangas, K.. Fragmentation as a novel measure of mood stability assessed by electronic diaries. Under review *Psychological Measurements*.
- 6. Grigsby, M., **Di**, J., Leroux, A., Xiao, L., Zipunnikov, V., Crainiceanu, C., and Checkley, W.. Novel Metrics for Growth Model Selection. Under review *Emerging Themes in Epidemiology*.
- 7. Urbanek, J., Spira, A., **Di, J.**, Leroux, A., Crainiceanu, C., and Zipunnikov, V.. Epidemiology of Objectively Measured Bedtime and Chronotype in the US adolescents and adults: NHANES 2003-2006. Under review *Chronobiology International*.

In Preparation

- 8. A study on extension of the fragmentation metrics.
- 9. A study on analyzing accelerometry data measured at multiple days.

PRESENTATIONS

- 1. Integrative Analysis of Multi-Block Contaminated Datasets (oral contributed). 2013 JSM, Montreal, Canada
- 2. Fragmentation of Physical Activity and Its Application (poster). 2016 Baltimore Aging Showcases, Baltimore, MD
- 3. Novel Statistical Framework to Quantify Fragmentation of Physical Activity (oral contributed). 2017 ENAR, Washington, DC.
- 4. Fragmentation of Physical Activity and Its Application (oral). 2017 ICAMPAM, Bethesda, MD.
- 5. Fragmentation of Daily Physical Activity: Prediction of Mortality in NHANES 2003-2006 (oral). 2017 IAGG, San Francisco, CA.

EDITORIAL ACTIVITIES

Referee for: IAGG

HONORS & AWARDS

The Louis I. and Thomas D. Dublin Award

Mar 2017

Washington Statistical Society Outstanding Graduate Student Award

Jun 2013

Phi Beta Kappa Honor Society Inductee

Mayl 2012

TEACHING EXPERIENCE

COMPUTING SKILLS	
SAS Certified Base Programmer for SAS 9	Jul 2013
SAS Certified Advanced Programmer for SAS 9	Aug 2013
CERTIFICATIONS	
International Biometric Society (ENAR)	
Washington Statistical Society (WSS)	
Americal Statistical Association (ASA)	
PROFESSIONAL MEMBERSHIP	
BIST 514 - Linear Modeling & Multivariate Analysis	Spring 2014
$\mathrm{PH}.140.751\text{-}2$ - Advanced Methods in Biostatistics I-II	Fall 2015
$\mathrm{PH}.140.753\text{-}4$ - Advanced Methods in Biostatistics III-IV	Spring 2016
$\mathrm{PH.140.6212}$ - Statistical Methods in Public Health I-II	Fall 2016
$\mathrm{PH.140.623\text{-}4}$ - Statistical Methods in Public Health III-IV	Spring 2017

R, Matlab, SAS, \LaTeX