

# JOHN ORUONGO

## EDUCATION

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### University of Wisconsin, Madison

PhD Industrial & Systems Engineering - Decision Sciences and Operations Research 2019

M.S. Industrial & Systems Engineering & M.S. Statistics

### Willamette University – MBA

2007

### Drury University

B.S. Business Administration & Computer Information Systems 2004

## RESEARCH AND TEACHING INTERESTS

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Risk modeling and management, healthcare decision making, statistical modeling, data mining, business analytics, healthcare analytics, optimization, simulation, management science and operations research.

## PUBLICATIONS

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- John Oruongo, Katie Ronk, Oguzhan Alagoz, Jonathan Jaffery and Maureen Smith - *Skilled nursing facility differences in readmission rates by the DRG category of the initial hospitalization* - Journal of the American Medical Directors Association (2020)
- Kyle L Grazier, Andrew R Quanbeck, John Oruongo, et. al- *What Influences Participation in Quality Improvement? A Randomized Trial of Addiction Treatment Organizations* Journal for Healthcare Quality (2014)

## MANUSCRIPTS IN PROGRESS

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- Oguzhan Alagoz, Sebastian Alvarez Avendano, John Oruongo and Gabriel Zayas-Caban *Optimizing Patient Transitions to Skilled Nursing Facilities* – Writing

## TEACHING EXPERIENCE

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**J. Mack Robinson College of Business - Georgia State University** 2019 - 2020  
*Visiting Assistant Professor* Atlanta, GA

- Taught graduated data mining course
- Taught graduate and undergraduate business modeling courses.
- Taught undergraduate introduction to business and technology course.

**Department of Industrial and Systems Engineering - University of Wisconsin** 2018  
*Guest Lecture* Madison, WI

- Guest lecture for the stochastic models in healthcare delivery systems course.

**Department of Mathematics - Missouri State University** 2008 - 2010  
*Math Instructor* Springfield, MO

- Taught introductory algebra courses and performed all duties pertaining to course instruction and management.
- Tutored undergraduate level mathematics through Calculus III.

## PROFESSIONAL EXPERIENCE

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### Department of Health Services - State of Wisconsin

*Research Analyst*

*Madison, WI*

- Researched the impact of interacting with Aging and Disabilities Resource Centers on entry into publicly funded long-term care.

### Department of Human Services - State of Oregon

*Internal Auditor*

*Salem, OR*

- Evaluated reports submitted to the federal government on State expenditure matched against federal welfare and checked expenditure entry samples to ascertain these were allowable per federal rules, regulations and stipulations.
- Reviewed spread of overtime use over the Department and compiled reasons for overtime.
- Analyzed probable correlation between need for overtime and staff retention and/or turnover.
- Assessed staffing data to determine cost-benefit analysis of contracting nursing services for the Oregon State Hospital.
- Recommended cost reduction techniques coupled with operational changes to stay within budget to upper management.

### Department of Administrative Services - State of Oregon

*Fiscal Analyst Intern*

*Salem, OR*

- Constructed a debt management tool that aided in debt consolidation and analysis for various State issued bonds, and used to account for an average of about \$36 million biennial debt obligations for the facilities division.
- Constructed a capital budget projection and forecasting tool to calculate biennial budget amounts required to fund the State of Oregon's capital construction and improvement projects.
- Researched and identified real estate owned by the State of Oregon as described in land deeds and historical legal property descriptions. Generated a report on state ownership of historical houses, and identified missing legal deeds of state owned land.

## TECHNICAL STRENGTHS

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### Computer Skills

R, SAS, SQL, Stata, Python

### Software

MS Office, GAMS, Gurobi, MATLAB