

# AMANUEL ZIMAM MELEKIN

Portland, OR | (503) 358-7337 | [azimam@pdx.edu](mailto:azimam@pdx.edu)

## SUMMARY

Experienced researcher/analyst with broad training and solid mathematical/statistical background, seeking a challenging position in data analysis, data science, statistical analysis, and scientific research to use my analytical, statistical, and scientific training/experience to understand systems, & solve problems/alleviate bottlenecks to improve system performance.

## CORE COMPETENCIES

- Applied Statistics (Multiple Regression, Logistic Regression, Multivariate Modeling, Structural Equation Modeling, Multilevel Regression, Generalized Linear Modeling)
- Data Mining, Machine Learning
- Research Methods, Research Protocol & Research Design, Experimental Design
- Data Collection, Data Cleaning, Validation, Modeling,
- R, SQL, Mplus, STATA, SAS, SPSS, Simulation
- Health Systems, Health Policy, Healthcare Services Research, Epidemiology, Public Health

## RESEARCH/WORK EXPERIENCE

### Statistical Consultant

Jun 16, 2014–Aug 2017

*OHSU-PSU School of Public Health (with Dr. Ana Quiñones)*

- Analysis of multilevel multi-group longitudinal data of chronic disease inconsistencies between racially and ethnically diverse older adults (using **Stata** & **Mplus**)

### Graduate Research Assistant

Dec 16, 2009 – Dec 31, 2016

*Portland State University, Portland, OR*

#### Oregon DHS Funded Projects

- Data analyst/Statistician (using **SPSS** and **Stata**)
- Participated in developing survey instrument for Community-Based Care Settings in Oregon
- Created database, entered data and provided undergraduate students guidelines for entering data
- Cleaned and analyzed data for “Oregon Community-Based Care Reports” projects
- Analyzed administrative Medicaid Data examining factors associated with multiple hospitalizations
- Analyzed other Community-Based Care data as requested

#### NIH Funded Projects

- Conducted thorough review of literature on Nonmedical use of Pharmaceutical Opioids
- Categorized and indexed National Data Sources on the Nonmedical use of Pharmaceutical Opioids
- Presented results at the College on Problems of Drug Dependence, 75th Annual Meeting, San Diego, CA
- Collaborated on System Dynamics model development to simulate the initiation and Nonmedical use of Pharmaceutical Opioids & simulate results of various policy interventions

#### Office of Institutional Research and Planning

- Generated quarterly summary reports for internal and external clients (using **SAS** & **Excel**)
- Updated website html to reflect quarterly summary reports
- Extracted data from data warehouse as requested by various Departments

### Graduate Student worker

Jun 01, 2014–Jun 15, 2015

*Prof. Jason Newsom (Portland State University)*

- Converted **Mplus** codes to **lavaan R** code for a book:  
“Longitudinal Structural Equation Modeling: A Comprehensive Introduction”

<http://www.longitudinalsem.com/>

- Proof read all book chapters, pointed out typos and suggested edits

## **Research Assistant**

Jan 1, 2007–Sep. 24, 2009

*United States International University, Nairobi, Kenya*

- Interviewed government officials on public-private partnerships
- Transcribed and coded qualitative data
- Analyzed qualitative data & assisted in drafting final research report

## **ACCOMPLISHMENTS**

- Three peer reviewed journal publications, one under review
- Several annual research reports presented to the State of Oregon
- Oral/poster presentations of research findings at scientific conferences
- Several quarterly & annual reports/“factbooks” regarding Portland State enrollment
- Support for publication of Methods/Statistics book (for Prof. Jason Newsom)
- Oral presentation of research findings at various colloquia at Portland State University

## **TEACHING EXPERIENCE**

### **Adjunct Instructor**

Sept 16, 2013–Dec 31, 2013

*Portland State University, Portland, OR*

BST/INTL/UNST-211A/233A – African Studies/Global Perspectives

## **PROFESSIONAL WORKSHOPS**

- **Applied missing data analysis.** Two-day workshop taught by **Dr. Craig Enders**, Portland, OR, June, 2015
- **Longitudinal structural equation modeling.** Two-day workshop taught by **Dr. Jason Newsom**, Portland, OR, June, 2015
- **Latent Growth Curve Modeling with R.** Two-day workshop taught by **Dr. Alexander Beaujean**, Portland, OR, June, 2015
- **Longitudinal Structural Equation Modeling.** Two-day workshop taught by **Dr. Jack McArdle**, Portland, OR, June, 2014
- **Structural Equation Modeling.** Two-day workshop taught by **Dr. Rex Kline**, Portland, OR, June, 2014.
- **Data Analysis with lessR (R package).** Two-day workshop taught by **Dr. David Gerbing**, Portland, OR, June, 2014
- **Statistical Mediation Analysis.** Two-day workshop taught by **Dr. David MacKinnon**, Portland, OR, June, 2013

## **PROFESSIONAL CERTIFICATE**

### **Programming with R for Data Science**

edX, Online Education Program

## **OTHER PROFESSIONAL COURSES**

### **R for Data Science**

Udemy, Online Education Program

### **Querying with Transact-SQL**

edX, Online Education Program

## EDUCATION

### **PhD, Systems Science**

Portland State University, Oregon, USA

### **MS, Systems Science**

Portland State University, Oregon, USA

### **MBA, International Business**

United States International University, Nairobi, Kenya

### **Bachelor of Science, Education, Mathematics**

Christ the Teacher Institute for Education, Nairobi, Kenya.

Institute of St. Mary's University of Minnesota, Minnesota, USA

## REFERENCES

### **Martin Zwick, Ph.D.**

Professor, Systems Science Ph.D. Program

Portland State University

(503)725-4987, [zwick@pdx.edu](mailto:zwick@pdx.edu)

### **Jason Newsom, Ph.D.**

Professor, Department of Psychology

Portland State University

(503)725-5136, [newsomj@pdx.edu](mailto:newsomj@pdx.edu)

### **Ana Quiñones, Ph.D.**

Associate Professor, Family Medicine

Oregon Health and Science University

(503)494-5889, [quinones@ohsu.edu](mailto:quinones@ohsu.edu)

### **Paula Carder, Ph.D.**

Associate Professor, Institute on Aging, School of Community Health

Portland State University

(503)725-5144, [carderp@pdx.edu](mailto:carderp@pdx.edu)