

AMANUEL ZIMAM MELEKIN

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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 31, 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

Jason Newsom, Ph.D.

Professor, Department of Psychology

Portland State University

(503)725-5136, newsomj@pdx.edu

Ana Quiñones, Ph.D.

Associate Professor, Family Medicine

Oregon Health and Science University

(503)494-5889, quinones@ohsu.edu

Paula Carder, Ph.D.

Associate Professor, Institute on Aging, School of Community Health

Portland State University

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