Nehemias Ulloa

CONTACT
INFORMATION

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RESEARCH
INTERESTS

State space models, applied statistical modeling, Bayesian statistics

EDUCATION

PhD in Statistics
Iowa State University, *Expected:* May 2019
Thesis: Bayesian Hierarchical Modeling and Analysis for Disease Outbreaks

MS in Statistics
Iowa State University, *Expected:* May 2017

BS in Mathematics
California State University, Bakersfield, 2013

PUBLICATIONS

Eduardo L. Montoya, Nehemias Ulloa, and Victoria Miller. (2014) A Simulation Study Comparing Knot Selection Methods With Equally Spaced Knots in a Penalized Regression Spline. *International Journal of Statistics and Probability*, v.3, n.3, p. p96. (URL)

Rosemary K. Le, Christopher V. Rackauckas, Anne S. Ross, and Nehemias Ulloa. (2013) Assessment of Statistical Methods for Water Quality Monitoring in Marylands Tidal Waterways. *SIAM Undergraduate Research Online (SIURO)*, vol. 6. (URL)

RESEARCH
EXPERIENCE

CREST(NSF), California State University, Bakersfield   **June 2012 - June 2013**
- Research assistant and investigated which method of fitting a penalized broken cubic spline performs best by comparing AIC, AICcorr, BIC, CV, and GCV criterias to the RSE

REU Site: Interdisciplinary Program in High Performance Computing, University of Maryland, Baltimore County   **Summer 2012**
- Took Math 447: Introduction to Parallel Computing
  - Learned parallel computing code using C with MPI, R with Snow, and Matlab
- My team collaborated with the Department of Natural Resources of Maryland on a project for 4 weeks where we identified trouble areas of the Chesapeake Bay using different statistical methods and ranking systems

Louise Stoke Alliance for Minority Participation, California State University, Bakersfield   **June 2010**
- Participated in a summer Combinatorics course
  - Learned Combinatorics and worked problem sets

AWARDS

Alliance for Graduate Education and the Professoriate (AGEP) Fellowship, Iowa State University   **Aug 2013 - June 2018**
- Joint-fellowship between Iowa State University, the University of Iowa, and the University of Northern Iowa dedicated to increasing the number of underrepresented minorities obtaining graduate degrees in science, technology, engineering and mathematics.

Ronald E.McNair Scholar, California State University, Bakersfield   **Sept 2011 - June 2013**

- Studied various smoothing approaches to modeling data.

Hawk Honors Program, California State University, Bakersfield **Sept 2009 - June 2013**
- General Education undergraduate honors program for students at CSUB

WORK EXPERIENCE

Iowa State University

Fall 2013	STAT 101	Principles of Statistics	TA
Spring 2014	STAT 101	Principles of Statistics	TA
Fall 2014	STAT 401	Statistical Methods for Research Workers	TA
Spring 2015	STAT 401	Statistical Methods for Research Workers	TA
Summer 2015	STAT 330	Probability for Computer Science	TA
Fall 2015	STAT 101	Principles of Statistics	Instructor
Spring 2016	STAT 544	Bayesian Statistics	TA
Summer 2016	STAT 401	Statistical Methods for Research Workers	TA
Fall 2016	STAT 305	Engineering Statistics	Instructor

California State University, Bakersfield

Winter 2011	MATH 75	Developmental Mathematics I	TA
	MATH 85	Developmental Mathematics II	
Spring 2011	MATH 75	Developmental Mathematics I	TA
	MATH 85	Developmental Mathematics II	
		Math Dept. Tutoring Center	Tutor
Fall 2011	MATH 75	Developmental Mathematics I	TA
	MATH 85	Developmental Mathematics II	
		Math Dept. Tutoring Center	Tutor
Winter 2012	MATH 75	Developmental Mathematics I	TA
	MATH 85	Developmental Mathematics II	
		Math Dept. Tutoring Center	Tutor
Fall 2012		Math Dept. Tutoring Center	RA
Winter 2013		Math Dept. Tutoring Center	RA
Spring 2013		Math Dept. Tutoring Center	RA
Summer 2013	MATH 75	Developmental Mathematics I	Instructor
	MATH 85	Developmental Mathematics II	Instructor

ACTIVITES

STAT-ers: Statistics Graduate student organization, Iowa State University **Aug 2013 - Present**
- Vice President **2015 -2016**
- President **2016 - 2017**

CSUB Math CLub:Undergraduate Math Student Organization, California State University, Bakersfield **Sept 2009 - June 2013**
- Treasurer **2011 - 2013**

Joint Mathematics Meeting, San Diego, California **January 2013**
- Poster Presentation: "Properties of a Broken Spline Model"
- Awarded a travel grant to present

Mathematical Association of America So Cal Meetings **Sept 2011 - May 2013**

- Attended the Mathematical Association of America sectional meetings

UMBC Summer Undergraduate Research Fest, University of Maryland, Baltimore County, **Aug 2012**

- Poster Presentation: "Water Quality Monitoring of Marylands Tidal Waterways "

COMPUTER SKILLS	**Mathematical Computing**: R, SAS, C++, SPSS, MPLUS, JMP **Other**: LaTeX, Git
PROFESSIONAL MEMBERSHIPS	American Statistical Association