

# NICHOLAS R. GRUNLOH

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## EDUCATION

**PH.D. STATISTICS & APPLIED MATHEMATICS** *Sept. 2018 - present*  
UNIVERSITY OF CALIFORNIA AT SANTA CRUZ

**M.S. STATISTICS & APPLIED MATHEMATICS** *Aug. 2014*  
UNIVERSITY OF CALIFORNIA AT SANTA CRUZ

**B.S. MARINE BIOLOGY/MINOR STATISTICS, *Cum Laude*** *June 2012*  
UNIVERSITY OF CALIFORNIA AT SANTA CRUZ

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## EXPERIENCE

**STATISTICIAN** *Oct. 2014 - present*  
NOAA, *National Marine Fisheries Service*

- Bayesian Hierarchical GLMs for Sparse-Data Stock Assessments ([assessment](#))
- Parallel Programming for Model Exploration and Bayesian Model Averaging ([ssc](#), [talk](#))
- HPC Cluster Design ([grant](#))

**THESIS RESEARCH** *Sept. 2011 - Aug. 2014*  
UCSC, *Applied Mathematics & Statistics*

- Process Control and Moving Average Models for Monitoring Optimization Progress ([paper](#))
- Stochastic Dynamic Programming for the Study of Adaptive Play Behavior ([paper](#))

### LAB WORK

UCSC, *Zehr Lab* *Summer '11*

- Marine Microbial DNA Extraction/Quantification and PCR

UCD, *Zalom Lab* *Summer '10*

- Agricultural Sampling of Lygus and Thrips Populations for Safe Pesticide Development

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## PROGRAMMING LANGUAGES/TECHNOLOGIES

PYTHON 5+ years	R 5+ years	C++ 3 years	OPENMP 2 year	MPI 1 year
SQL 3 years	UNIX 5+ years	TensorFlow 1 year	Stan 1 year	HTML as needed

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## TEACHING

**INSTRUCTOR** *Fall '14 - Spring '17*

PROBABILITY OF GAMES  
UC SANTA CRUZ  
*Applied Math & Statistics*

STATISTICS  
UC SANTA CRUZ  
*Applied Math & Statistics*

ELEMENTARY STATISTICS  
CABRILLO COLLEGE  
*Mathematics*

**TEACHING ASSISTANT** *Sept. 2012 - Aug. 2014*  
UC SANTA CRUZ

BIOSTATISTICS  
*Applied Mathematics & Statistics*

GENETICS  
*Molecular, Cell & Dev. Biology*

STATISTICS IN SOCIOLOGY  
*Sociology*

COMPUTATIONAL METHODS  
*Applied Mathematics & Statistics*

MICROBIOLOGY LAB  
*Microbio & Envir. Toxicology*

STATISTICS  
*Applied Mathematics & Statistics*