

# Christopher Tull

446 Deodar Ave, Oxnard, CA 93030 | [chris@argolabs.org](mailto:chris@argolabs.org)

## LINKS

Bio: [christophertull.org](http://christophertull.org)  
Company: [argolabs.org](http://argolabs.org)  
Github: [christophertull](https://github.com/christophertull)  
LinkedIn: [ctull](https://www.linkedin.com/in/ctull)

## PROGRAMMING

Daily use:  
Python • R • SQL  
markdown

Regular use:  
Javascript • HTML • bash

Prior professional use:  
Java • C++ • C

Tools & Utilities  
Amazon Web Services  
Apache Airflow • Git  
Excel • RStudio • PyCharm

## AWARDS

Best Urban Water Tool  
California Water Data Challenge  
2016

Best Paper  
Bloomberg Data for Good Exchange  
2015

## PROJECTS

Open Water Rate Specification  
Open data format for water rates

RateComparison  
Forecast the impact of alternate water  
rate structures

Statewide Efficiency Explorer  
Understand the impact of water  
efficiency targets in CA

NYC Benchmarking  
Visualizing energy use in large  
buildings

## EXPERIENCE

### ARGO | LEAD DATA SCIENTIST

Jan 2016 - Current

- Work with water managers through California Data Collaborative
- Design and build data pipelines to integrate water data from across California
- Created first-ever implementation of Gov. Brown's Executive Order B-37-16
- Developed a suite of tools for analyzing water rates
- Statistical analysis of the impact of water conservation measures

### INDEPENDENT CONSULTANT

Current

- Design and build big data systems on AWS
- Training in data science best practices

### NYU - URBAN INTELLIGENCE LAB | RESEARCH ASSISTANT

Jan 2015 - Dec 2015

- Developed official energy benchmarking website for City of New York
- Predicted energy use for 1.1 million buildings in NYC
- Published in peer-reviewed journals and conferences

### GBL SYSTEMS CORPORATION | SOFTWARE ENGINEER INTERN

Summer 2014

- Rapid-prototyped a proximity awareness module for Android applications

### MAX PLANCK INSTITUTE | RESEARCH ASSISTANT

Dec 2012 - Mar 2014

- Developed novel algorithms to detect cellular features in microscope images

## EDUCATION

2015	New York University	M.S. Urban Informatics
2014	CSU Channel Islands	B.S. Mathematics & Computer Science
2013	Universität Tübingen	Study Abroad: German, Computer Science

## PUBLICATIONS

Schmitt, E., Tull, C., and Atwater, P. "Extending Bayesian structural time-series estimates of causal impact to many-household conservation initiatives." Submitted to the Annals of Applied Statistics.

Kontokosta, C. E., & Tull, C. (2017). "A data-driven predictive model of city-scale energy use in buildings." Applied Energy, 197, 303-317.

Tull, C., Schmitt, E., Atwater, P. (2016) "How Much Water Does Turf Removal Save? Applying Bayesian Structural Time-Series to California Residential Water Demand." Knowledge Discovery and Data Mining.

Atwater, P., Tull, C., Schmitt, E., Lopez, J., Atwater, D., & Adibhatla, V. (2016). "Transforming how water is managed in the West". Bloomberg Data for Good Exchange.

Kontokosta, C., Tull, C., Marulli, D., Pingerra, R., & Yaqub, M. (2015). "Web-Based Visualization and Prediction of Urban Energy Use from Building Benchmarking Data." Bloomberg Data for Good Exchange.