# Christopher Tull

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# LINKS

Bio: christophertull.org Company: argolabs.org Github: christophertull LinkedIn: 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

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

#### TULL DATA SYSTEMS | PRINCIPAL

Current

- Design and build cloud-based big data systems
- 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.