



education

- SINCE 2013** | PhD. Student in Environmental and Water Resources Engineering
NSF IGERT Fellow in Water and Diplomacy, Dean's Fellow, Tufts University
- 2011-2013** | Bachelor of Science, Earth and Environmental Engineering
Cum Laude, Tau Beta Pi, Columbia University
- 2008-2013** | Bachelor of Arts, Environmental Studies with a minor in Physics
Joyce Gorn Memorial Prize for Research, Oberlin College

experience

- SINCE 2015** | Product Research and Development - OptiRTC Inc, Boston, MA
Responsible for designing and testing the decision logic for real-time forecast-driven semi-autonomous stormwater controls.
- 2013-2014** | Volunteer Product Development Engineer - ELITE Education, New York, NY
Lead development of the *Pop-Up Labs: STEM Classroom in a Backpack* program, which received a Google Roots In Science and Innovation (RISE) award in partnership with WAAW (Working to Advance Science and Technology Education for African Women) Foundation. (<https://bit.ly/GRISE>)
- 2013** | Summer Engineering Intern - Stroud Water Research Center, Avondale, PA
Worked on various open-source environmental sensing projects; developed an open-source SDI-12 library for Arduino (see *Software* below).

software

- 2015** | The Andean Biotic Index (ABI) Calculator: a mobile phone application to streamline the evaluation of community composition of benthic macroinvertebrates in high altitude Andean streams a water quality indicator. (<https://bit.ly/ABICalc>)
- 2013** | Arduino-SDI-12: an open source implementation of the SDI-12 environmental sensor communications protocol for the Arduino platform. (<https://bit.ly/ArduinoSDI12>)

publications

[Profile on Google Scholar](#)

- 2014** | Jain RK, Smith KM, Culligan PJ, Taylor, JE. *Forecasting Energy Consumption of Multi-Family Residential Buildings Using Support Vector Regression: Investigating the Impact of Temporal and Spatial Monitoring Granularity on Performance Accuracy*. Appl Energy (2014), <https://dx.doi.org/10.1016/j.apenergy.2014.02.057>