# STEPHEN SUFFIAN

stephen.suffian@gmail.com (267) 671 8589

Relevant Links Address

Github: www.github.com/ssuffian 1567 Gregory Drive LinkedIn: www.linkedin.com/stephensuffian Warrington, PA 18976

#### **EDUCATION**

## University of Villanova, Villanova, PA

- Masters of Science, Sustainable Engineering, Graduated in May 2013
- Currently pursuing PhD in Electrical and Computer Engineering
   Overall GPA: 3.80
- Expected graduation in May 2017

## Schreyer Honors College, The Pennsylvania State University, University Park, PA

- Bachelor of Science, Electrical Engineering
- Graduated in May 2010

#### **COMPETENCIES**

- Languages/Platforms: Linux, Java, Python, JavaScript
- Databases: PostgreSQL, MySQL, SQLite, Apache Cassandra, Apache Solr, mongodb
- Machine Learning: Support Vector Regression, Artificial Neural Networks, Hidden Markov Models
- Implemented Stacks (LAMP, Linux-Tomcat-Solr-Java-Ajax, Linux-Apache-mongodb-django-Ajax)

#### RELEVANT EXPERIENCE

## Co-founder, Chief Technical Officer for Needsgap LLC

January 2015-Present

Overall GPA: 3.80

- Design and develop full-stack custom church management web service (hisKingdom.info)
- Create a unique ranking system match members to events and groups using profile data
- Service currently used by over 5000 church members

#### PhD Candidate, Information-Driven Grid Flexibility for Nicaragua

September 2013-Present

- Evaluate value of improved day-ahead forecasting for regional/national power grids through full-scale simulation of daily grid operations
- Develop improved machine learning methods for day-ahead forecasting using publically available and locally gathered data

## Data Science for Social Good Fellow 2014 (Chicago)

June 2014-August 2014

- Developed web portal for utility customers with smart electricity meters to view their disaggregated energy consumption and targeted energy reduction recommendations
- Built regressions and hidden markov models in python to disaggregate household energy signals in order to estimate proportion of energy usage taken by the HVAC system

### Humanitarian Engineering and Social Entrepreneurship Fellow (Kenya) January 2011-March 2013

- Interviewed 100+ supply chain actors to discover value-addition opportunities
- Conducted research to develop blueprint for appropriate technology business models
- Taught technology literacy to 30 diabetes educators to allow access to tele-health system
- Developed self-sustaining preventive-health venture with community health workers which currently sees over 10,000 community members each year