Matthew Moocarme

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GITHUB
https://github.com/moocarme

LINKEDIN
https://www.linkedin.com/in/
matthew-moocarme-78a053b6

A motivated, skilled PhD physicist with comprehesive, in-depth programming experience, strong problem-solving skills and excellent communication.

EXPERIENCE

The Graduate Center of CUNY
Graduate Student Researcher
2010 - present

- Developed, implemented, and tested new and novel theories that end in peer-reviweed publications.
- Built analytical models and tools with mathematical software and scripting languages.
- Designed experiments to test hypotheses quickly and efficiently to gain intuition and results.

Queens College of CUNY
Adjunct Lecturer
2011 - present

- Overhauled and taught the "Physics for Computer Scientists II" lab, that incorporated Python and Matlab to develop students understanding of physics.
- Emphasis placed on understanding causal relationships and communicating results via visualizing data.

EDUCATION

Expected Graduation: September 2016

THE GRADUATE CENTER OF CUNY	PhD Physics in progress
THE GRADUATE CENTER OF CUNY	M.Phil. Physics in progress
QUEENS COLLEGE OF CUNY	M.S. Physics in progress
CALIFORNIA STATE UNIV., LONG BEACH	B.S. Physics, 2010 GPA: 3.85

PUBLICATIONS

3 first author publications
    DOI: 10.1364/OE.23.028471,
    DOI: 10.1364/OME.4.002355,
    DOI: 10.1021/nl4039357,
    1 in progress

Other publications
    DOI: 10.1364/OPTICA.2.000447,
    DOI: 10.1364/OE.20.019214,
    DOI: 10.1364/OE.24.010402,
    1 in progress

INDEPENDENT PROJECTS

Has Vision Zero Worked? - *public.tableau.com/profile/matthew.moocarme/*
An analysis into whether Bill de Blasio's campaign to reduce the number of traffic-related injuries in is NYC is successful, and data-driven recommedations for increasing its effectiveness.

If you live in NYC, here's how you're going to die (statistically speaking).
- *public.tableau.com/profile/matthew.moocarme/*
Finding trends in the leading causes of death in NYC.

Why does all country music sound the same? - *github.com/moocarme/RiffChruncher*
Data mining song data of country music and comparing data to other genres.

Coursera Data Science Specialization - *https://www.linkedin.com/in/matthew-moocarme-78a053b6*

PROFESSIONAL SKILLS

Skill	Level	Skill	Level	Skill	Level
MATLAB	●●●●●	SQL	●●●●○	LaTeX	●●●●●
PYTHON	●●●○○	GIT	●●●●○	ILLUSTRATOR	●●●○○
R	●●●●○	TABLEAU	●●●○○		