

Shamikh Hossain

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experience

Energy Data Analytics Lab, Duke University— *Research Fellow*
May 2017 - Present

I helped design an **end-to-end machine learning pipeline**, streamlining data acquisition, evaluation and conversion in Python for end goal of **modeling electrification rates directly from aerial imagery**; worked to curate a **training dataset** using image processing libraries, scikit-learn, Matlab, and ArcGIS. Currently continuing research to implement deep-learning model and develop georeferenced **electricity access maps** for developing regions of interest.

Office of Information Technology, Duke Biology— *IT Consultant*
September 2016 - June 2017

Work in a team using ServiceNow CRM platform to provide tailored **software and hardware support** for all computing in the Biology department by researching technical issues, writing internal and external documentation

Duke Student Organization Finance, Durham, NC— *Auditor*
September 2016 - Present

Analyze consumption metrics of campus organizations to help school administration **determine optimal allocation** of resources

Dallas Area Model United Nations, Dallas, TX— *President & Tech Lead*
May 2015 - May 2016

Supervised 20 member-team to organize Model UN conference for high school students in Dallas metroplex. Managed **~\$11,000 budget**, built **web portal** and social media platform, implemented **merit-based team selection**

education

Duke University, Durham, NC - B.S, Computer Science, B.S, Economics
August 2016 - May 2020

projects

Biology IT Inventory - **Web platform** and REST API built on Django, PostgreSQL to track loaner equipment inventory and users for Biology IT

HitChecker - Python/Tkinter **program** using Amazon Mechanical Turk API to allow a user to efficiently evaluate crowdsourced image annotation data

DAMUN Website - Created new conference **website** for Model UN school organization, website was awarded grant from UN Foundation of America

Web Tutorial Series - maintained **YouTube channel** of tutorials on computer software and graphic design, accumulated 185,000+ video views

skills

Software: Python, Java

Data: NumPy, SciPy, pandas, scikit-learn, matplotlib, R, Matlab, Excel, Jupyter

Web: HTML/CSS/JavaScript, Rails, Django, Flask, Node.js

General: Git, Linux, scripting

courses

Data Structures & Algorithms, Microeconomics, Computer Architecture, Linear Algebra for Computer Science, Multivariable Calculus for Economics, Energy Data Analytics Lab, Intro to Computer Science

Independent Coursework:

Lynda: Django

Enthought: NumPy

other

University Dean's List
National AP Scholar
IB® Diploma Recipient
Burger King Scholar
YouTube Partner