# Shamikh Hossain

GitHub : **shamikh-mill** | Blog : **shamikh.tech** | LinkedIn : **shamikh** | Contact : **shamikh.hossain@duke.edu** | (469) 386-1378

## experience

**Carin Lab at Duke |** Durham, NC | Research Assistant
September 2017 - Present

Working to apply deep-learning techniques on medical imagery from Duke Hospital, advised by Dr. Lawrence Carin of the Information Initiative at Duke.

**Duke University Energy Data Analytics Lab |** Durham, NC | Research Fellow
May 2017 - Present

Contributed to design of **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 in a team 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.

**Duke Office of Information Technology |** Durham, NC | IT Consultant
September 2016 - June 2017

Worked 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

## 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

## recognition

University Dean's List
National AP Scholar
International Baccalaureate Diploma Recipient
Burger King Scholar
YouTube Partner
3rd Place; Microsoft Coding Competition at Duke (tied)