# Shamikh Hossain

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# experience

#### Energy Data Analytics Lab, Duke University—Research Fellow

May 2017 - Present

Investigating deep-learning methods on aerial imagery in NSF-funded research under Dr. Kyle Bradbury. Working in a team to develop and train a classifier for evaluating electricity access from satellite images using scikit-learn, TensorFlow, Matlab, ArcGIS. Continuing research to develop classifier through academic year. Published open-source training dataset.

#### Office of Information Technology, Duke Biology— IT Consultant

September 2016 - June 2017

Work in team to provide tailored software and hardware support for computing in the Biology dept. by researching technical issues, writing internal documentation, maintaining external wiki, automating installations

#### **Duke Student Organization Finance**, Durham, NC— Auditor

September 2016 - May 2017

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

### education

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

# projects

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

**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, Ruby

**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

Independent Coursework: Lynda: Django

Enthought: NumPy

# other

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