

# NAVRAJ NARULA

<http://navierula.github.io>  
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## EDUCATION

**M.S. in Computer Science and Journalism** **Spring 2018**  
Columbia University – New York, NY

**B.A. in Computer Science, English, and Education** **Spring 2016**  
Boston University – Boston, MA

## WORK

**Course Assistant – Computing in Context (Python)** **Current**  
Columbia Engineering – New York, NY

Selected as 3 of 10 course assistants to lead lab sections of 20+ undergraduates, engage with students in office hours and on Piazza, grade 100+ assignments

**Digital Products Intern** **Summer 2016**  
MIT Press – Cambridge, MA  
Implemented functions in Python script to automate ePub creation, validated parsing errors in XML/HTML documents, bookmarked PDF textbook files

**Data Storytelling Researcher** **Spring 2016**  
Boston University Computer Science – Boston, MA  
Created schema and implemented an entire database using MySQL Workbench to aid researcher, Maggie Mulvihill, in collecting information for a confidential story

**Course Grader – Introduction to Databases and Data Mining** **Spring 2015 –2016**  
Boston University Computer Science – Boston, MA  
Graded assignments in SQL, Python, and Weka

## PROJECTS

**Markov Text Generation on Poetry**  
Devised baseline and advanced algorithm using Python's NLTK library to produce coherent text based off Richard Wright's poetry, conducted 74-participant survey that demonstrated an error rate of < 30% on selected outputs

**Superhero and Archenemy Relational Database**  
Created a database consisting of 11 relations in MySQL Workbench depicting fictional comic book relationships, wrote 1000+ lines of code in Python to access DB operations such as insertion, deletion, and selection

**Sentiment Analysis of Trending Hashtags on Twitter**  
Utilized tweepy library and Twitter API to access tweets by hashtag and categorized trending topics under positive or negative category based on self-devised scoring algorithm written in Python

## SKILLS

**Coding** Python, SQL, HTML (Fluent) – Java, C, C++ (Proficient) – Javascript, R, Ruby on Rails (Learning) – Active CodeAcademy user

**Writing** Awarded by Harvard University and Boston University for excellence in academic writing – Fluent in AP and MLA style, practicing technical writing

**Teaching** Experienced in elementary-level teaching of mathematics and personal one-on-one tutoring for all grade levels