

NAVRAJ NARULA

<http://navierula.github.io>

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INTERESTS

Information retrieval via applications of natural language processing, text mining, and sentiment analysis / Assistive technology in terms of robotics, hardware, or machinery / Incorporation of social media in marketing, business, and teaching / Hackerspace innovation and collaboration / Forming relationships with clients / Creative storytelling (both in fiction and in numbers)

EDUCATION

M.S. in Journalism and Computer Science *Beginning August 2016*

Columbia University J-School and SEAS New York, NY

B.A. in English Literature and Computer Science *May 2016*

Boston University College of Arts and Sciences Boston, MA

B.S. in Secondary English Education *May 2016*

Boston University School of Education Boston, MA

SKILLS

Programming Languages: Python, HTML, SQL (Fluent), CSS, Java, Javascript, Haskell, C (Learning)

Spoken Languages: English, Thai (Native), Punjabi (Comfortable), Spanish (Beginner)

EXPERIENCE

Data Storytelling Researcher, *Boston University Directed Study - Boston, MA* *January 2016 - Present*

- Supervised by: Dr. Maggie Mulvihill, Journalism Professor and Faculty Fellow at Hariri Institute for Computing and Computational Science
- Create searchable database of criminal conviction reversals in Massachusetts, over the past 5 years
- Design a final report on findings via means of querying, with aims of being published by a local newspaper

Technical Education Intern, *Cambridge Community Television - Cambridge, MA* *July 2015 - Present*

- Provide one-on-one assistance to community members in technical areas: programming, image/content editing, Office or iWork navigation, and general computer assistance for elders over the age of 50
- Enroll in CCTV-offered classes to further knowledge of software individuals may be working with
- Build templates in HTML/CSS/Javascript to distribute to lab attendees as starting point for projects
- Handle issues of classroom misconduct via mediation between individuals or private conversation

Course Grader, *Boston University Computer Science Dept - Boston, MA* *January 2015 - Present*

- Course: CS105 - Introduction to Databases and Data Mining, taught by Dr. Dave Sullivan
- Provide numeric grades for assignments related to: Python programming, SQL query plans, data extraction, file manipulation, Weka data mining
- Outline grading reports for instructor, specifying students who may require extra assistance

Catalyst Editor, *The Daily Free Press - Boston, MA* *September 2014 - Present*

- Revise science/tech-related articles, matching edits according to standard AP style
- Conduct interviews with individuals and document recorded transcriptions for feature pieces
- Maintain contact with up to 50 staff writers during story assignment up until point of publication, offering input and edits along the way

Desktop Support Assistant, *Boston University Computer Science Dept - Boston, MA* *May 2013 - Present*

- Reboot Linux and Window machines during package loss, marking machine name in Nagios log
- Provide assistance to supervisor in regards to software installation and hardware maintenance

- Create computer science accounts for declared majors and any undergraduate student enrolled in a computer science course
- Offer one-on-one assistance to students experiencing difficulty in introductory courses

Research Intern, *The Center for Education Reform - Washington, DC* *June 2014 - August 2014*

- Maintained and updated databases with information pertaining to all charter schools within the USA
- Contributed to Edspresso by writing blog posts related to educational policy
- Planned event featuring self-selected panelists and opened up invitation to all interns in the metro area interested in pursuing a career in educational policy

Assistant Teacher, *Bowman Elementary School - Lexington, MA* *September 2012 - December 2012*

- Provided one-on-one reading lessons to third grade students experiencing difficulty
- Graded assignments and returned them promptly within the day
- Planned and delivered a lesson plan on the water cycle to a classroom of third-graders, with the aid of a self-created website. See: <http://wayofwater.weebly.com>

TEAMS AND PROJECTS

Systems Analyst, *Global App Initiative (GAI) - Boston, MA* *September 2015 - Present*

GAI is an on-campus organization at Boston University that trains students to develop mobile-web applications for local non-profits. My team and I are working to create an anonymous Q and A forum for the Boston Public Health Commission, coding for Android (Java) and iOS (Swift) devices. Alongside programming, I maintain our Github repositories. My partner and I are working to create the iOS app using XML.

Independent Research, *Sentiment Analysis via Twitter Data* *July 2015 - Present*

With the aid of Professor Nik Brown (Northeastern University), I gathered tweets hashtagged with trending topics using the tweepy library in Python. I then developed a text classification model to categorize 50 random sentiments into either a positive or negative category, done so by keeping track of various dictionaries. Accurate results were displayed by means of a self-implemented sentiment score algorithm. Still a work-in-progress. See:

<https://navrajnarula.files.wordpress.com/2015/02/sentiment-analysis.pdf>

Software Engineering Project - Step, *Boston University - Boston, MA* *September 2015 - December 2015*

My classmates and I worked together to develop an algorithm that would generate the most "beautiful" path as opposed to the most optimal path. Our algorithm is a variation of Dijkstra's algorithm, which prioritizes the shortest path as defined by the user. See:

<https://github.com/jmuru/cs411/blob/master/README.md>

LEADERSHIP ROLES

Vice President of Internal Affairs, Boston University College of Arts and Sciences

Peer Mentor and FY101 Instructor, Boston University College of Arts and Sciences

First-Year Student Outreach Project Staff Leader, Boston University Community Service Center

Admissions Ambassador, Boston University Admissions

Admissions Student Diversity Board, Boston University Admissions

AWARDS

Ford Foundation Travel Scholarship, invitation to participate in journalism and virtual reality hackathon organized by MediaShift in Los Angeles

Joan Dee and Boyd Dewey Book Award, Boston University School of Education

PUBLICATIONS

Harvard Summer Review, Issue 19, Septimus Warren Smith: Woolf's Hide-and-Seek Target

Boston University WR Journal, Issue 5, The Epiphany as the Evanescent Moment: Flashes of Unintellectual Light in James Joyce's *Dubliners*