Swati Barua

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EDUCATION

New York University Tandon School of Engineering – Brooklyn, NY
Bachelor of Science in Computer Science, Minor in Integrated Digital Media (Design)
Achievements: *2018 Trivago Tech Camp 2.0, 2018 MongoDB World Diversity Scholarship, 2018 Grow with Google Scholarship (Android Development), 2017 Forbes Under 30 Scholar, 2017 Google's Women TechMakers, 2017 NSF I-Corps, NYU 2016 Grace Hopper Conference Scholarship, 2016-2017 TRIO Grant, 2013-2017 UFT Scholarship Fund*

SKILLS

Computer Languages: Java, MySQL, Python, JavaScript, HTML/CSS
Tools: Tableau, MS Word/Excel/PowerPoint, Git, Atom, IntelliJ, Photoshop
Languages: Bengali, English   **Hobby:** Photography (@[arcturusInk](#))

PROJECTS

- **[TweetVisualization](#)** (Python, TextBlob, Matplotlib): Used tweets from Twitter to perform sentiment analysis regarding the subject of "automation," then visualized the data using matplotlib
- **[Text Analysis](#)** (Java): Read a text file, extracted information, such as: word(s) that appeared the most and least, longest word(s), average word length, total number of words and characters, and frequency in which a word appeared in the text
- **[I-O-CSV-File](#)** (Java, Opencsv): Loaded data from a CSV file, cleaned the data according to specification, and outputted the validated data to HTML and EXCEL files

EXPERIENCE

AP Calculus & Physics Tutor – Double Discovery Center, Columbia University, NY   Present
- Teach twenty-two students AP Calculus material and forty students Physics material

Associate Teacher – TestRocker, Harlem, NY   Present
- Provide one-on-one instruction on SAT Math, Reading and Writing sections to different groups of twenty students

Lead Instructor – Girls Who Code, Jersey City, NJ   Summer 2018
- Lead a group of 20 high school girls and 1 Teaching Assistant on a 7-week curriculum at JPMorgan Chase site
- Taught computer science fundamentals such as: basic data structures, function, loops, conditionals and variables in the context of Data Science, Web Dev, Robotics, Python and Scratch
- Provided feedback on debugging individual/group coding projects, demos, execution of technical implementation, scope of projects, design decisions, ideation and presentation skills/format
- Maintained correspondence with Girls Who Code and JPMorgan Chase to coordinate classroom logistics, facilitate speaker series, and chaperone field trips

Fellow – The Impact Fellowship, NY, NY   Winter 2018
- One of thirty-five fellows selected out of hundreds of applicants in a fellowship inspiring the next generation of social entrepreneurs
- Ideated a wristband that gave visually impaired persons greater access to mobility via echolocation for a team project

Robotic Process Automation (RPA) Intern – Travelers Insurance, Hartford, CT   Summer 2017
- Delivered an RPA process that automated interactions between applications such as random.org, Single Sign On, Automation Anywhere (AA) and Traveler's internal password resetting sites to set/reset passwords in VMs
- Created 5 TaskBots and 3 MetaBots using AA according to specifications provided by the Tech Lead Consultant
- Applied concepts such as regex, error handling/exceptions, unit testing and modularizing to RPA
- Used Java to parse files and coded an algorithm that compared matching strings between two files
- Created the frontend of a messaging platform using Bootstrap Framework for a group project with three interns

Undergraduate Summer Researcher – **New York University,** Brooklyn, NY   Summer 2016
- Plotted and programmed Tandon's history in an augmenting reality interface using Layar's API
- Implemented table definitions according to Layar's specifications and project's needs, sorted through Poly's archive to identify relevant data points, wrote insertion queries and executed other queries using PHP's prepared statements
- Wrote a seven page documentation of the whole project, published an abstract and presented in a poster session