Deb Banerji

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EDUCATION

Georgia Institute of Technology, Atlanta, GA   August 2015 - Present
- Bachelor of Science in Computer Science - GPA: 3.96   *Graduating May 2019*

SKILLS

Languages: C, Java, Python, Hack, Assembly, HTML, CSS, JavaScript, TypeScript
OS: Linux, Windows, macOS
Technology: Android, Git, Mercurial, Maven, Bash, Node.js, Electron, MongoDB, Firebase, Angular, React

EXPERIENCE

Teaching Assistant - *Georgia Institute of Technology*   August 2016 – Present
- **Data Structures and Algorithms, Design and Analysis of Algorithms**
  - Grading exams, homework assignments for class of over 300 students
  - Leading weekly recitations, holding office hours to cover material taught in class
  - Designed extra practice assignments to help students prepare for exams

  Intelligent Grading Tool - *TypeScript, Java, Electron, Angular*
  - Built GUI based grading tool for student code to reduce errors, increase grading speed by a factor of 3
  - Designed grading tool to have support for multiple platforms and languages
  - Wrote integrations with unit test frameworks to automatically find errors
  - Wrote algorithms to perform static code analysis and flag suspicious code

Software Engineering Intern – Internationalization Team - ***Facebook***   May 2018 – August 2018
- Created tool to determine to track and determine the translation status of strings - *Hack*
- Implemented functionality for determining and linking to relevant project and source information
- Created responsive frontend for displaying string information - *React*

Software Engineering Intern - Site Team - ***NCR Corporation***   May 2017 – August 2017
- Developed site service with 6 other engineers in an agile development environment
- Implemented RESTful API endpoints for site service - *Java, Spring*
- Wrote code for testing, querying, saving data to Solr database - *Java, Spring, Solr*
- Wrote behavior driven tests to cover code functionality - *Java, Spring, Cucumber*

Software Engineering Intern - Weather Team - ***Yobi Technologies***   June – August 2016
  Extreme weather prediction tool - for use by central government in northeast India to issue flood
  warnings to residents - used in 4 states with combined populations of over 20 million
- Implemented tool to map predictions from global climate models to flood prone locations and send SMS alerts to residents on a per location basis - *Flask, JavaScript, Python*
- Wrote scripts to periodically update weather data in the database - *Python*
- Built Android application with GPS integration to streamline installation of weather stations - *Java*

PROJECTS - Placed in over 10 different hackathons since 2016

'Infinity Gauntlet' - AR based treatment - **Winner, Faculty Choice Award, Best IOT Hack, HackGSU 2018**
- Implemented Android application for treating phantom limb syndrome using augmented reality – *Unity, ARCore*
- Created portable glove mounted system integrated with Myo Armband to read user inputs and wirelessly transmit information to treatment application – *Python, Raspberry Pi, Myo*

'Mapingo' - Location based order tracking application - **Runner Up, HackEmory 2017**
- Built Android application for submission of food orders and tracking of users using GPS - *Java*
- Created web interface for setting up points of sale, tracking orders and estimating time of arrival based on location and movement speed of users - *Angular, JavaScript*

'Memento' - Image compression algorithm - **Winner, Best Indoor Hack, HackGSU 2017**
- Implemented algorithm for separation of text from images for more efficient storage - *Python, OpenCV*
- Built web interface for uploading, downloading, compressing and decompressing images - *Angular*