Shraddha Singh

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Education

Georgia Institute of Technology
Master of Science in Computer Science
Machine Learning
Dec 2019
GPA: 3.85/4.00

University of Texas at Austin
Bachelor of Science in Electrical and Computer Engineering
May 2015
GPA: 3.71/4.00

Links

Github:// **singhshraddha**
LinkedIn:// **shraddhasingh1**

Volunteering

Introduce a Girl to Engineering Day | 2013
Demonstrated and monitored hands-on STEM experiments

UTCS Anniversary | 2016
Communicated with UT Austin students and answered questions about day to day at work

Penguins at IBM | 2018
Represented Business Resource Groups within IBM and educated potential IBM interns about BRGs

Programs Participated

Intel Ultimate Engineering Experience | Participant, 2012
- Hands-on experience on small-scale engineering projects
- Built a quadro-copter controlled by raspberry pi
- Developed a video game in **C#**
- Brainstormed and proposed a mock solution for non tangling headphones

Experience IBM Cloud with TJ Bot | Participant, 2018
- Collaborated to create speech translator, and a conversation application in **NodeRed**
- Used Speech-to-text, image classification, and text-to-speech modules prodived as part of the challenge

Work Experience

IBM

Data Scientist Developer, 2020-Present
- Developer for Maximo Monitor in Maximo Asset Application Suite
- Developed backend APIs and integrated anomaly detection modules for time-series data for **python** application
- Investigated anomaly detection techniques and models using customer data
- Added matrix profile discords as anomaly detection model in product
- Advocated for and developed data quality checks for time-series data
- Maintained and deployed services on **Kubernetes**

Extreme Blue Data Science Intern, 2019
- Found patterns and correlation in servers' proactive data
- Used **ELK stack** and **python** for data visualization and for drawing statistical inferences about the quality of data
- Applied supervised machine learning models to predict negative outcomes for server systems using the tools available within Watson Studio
- Pitched the project to IBM Executives on a weekly basis

Verification Engineer, 2015-2018
- Implemented functional unit verification for OpenCAPI data link unit in Power9 processor and for memory controller unit in Power9 and Power9-Axone processors using **C++/RTX**

Research Experience

University of Alabama | Research Assistant, ESE REU 2014
Project: Evaluating the contribution of a code reviewer's attribute in determining the effectiveness of a review
- Built a dataset of effective review requests and reviewers to calculate different characteristics of effective reviewers
- Used IBM's **SPSS** toolkit to construct **decision trees** in order to analyze and rate the effects of these characteristics
- Used Amazon's Mechanical Turk as a crowd-sourcing platform for generating labeled dataset and used **SQL** to query open-course code sources

Florida Institute of Technology | Research Assistant, AMALTHEA REU 2013
Project: Mixture Distribution Modeling on the Tangent Space of Hyper-Spherical Reproducing Kernel Hilbert Space
- Mapped dataset in a Hilbert space, using kernel transformations, to obtain a distribution suitable for machine learning tasks
- Investigated the outcome of transformation in clustering and classifying tasks
- Compared classification results to 1-Nearest Neighbor, Naïve Bayes, and Quadratic Discriminant Analysis classifiers, and clustering results to hyper-spherical clustering in **Matlab**

Other Experience

Team project | Student Developer, 2019
- Developed a solution to help track and recommend a healthy diet to users
- Created backend using **Django** framework and **sqlite3** database
- Implemented **K-means** to recommend food items lacking in a user's diet

Team project | Student Developer, 2019
- Used transfer-learning framework on pre-trained **Cov-Nets** to asses the quality of food photographs and promote better quality images
- Labeled a subset dataset provided by Yelp for the classification problem

UT Austin | Undergraduate Teaching Assistant for Intro to Electrical Engineering, 2013-2015
- Mentored freshmen students in ECE coursework and career