Akshita Bhagia

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Education

University of Massachusetts, Amherst Amherst, MA
Master of Science (Computer Science) Sep 2018- Expected May 2020
Relevant courses: Machine Learning, Neural Networks, Systems for Data Science (ongoing).

Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT) Gandhinagar, India
Bachelor of Technology (Information and Communication Technology) Jul 2011- May 2015
Relevant courses: Data structures, Algorithms, Database Management Systems. **GPA**: 8.95/10

Professional Experience

Lead Platform Development Engineer at InFoCusp Feb 18 – Jun 18
Research Programmer at InFoCusp Jul 15 – Feb 18

In collaboration with Cerebellum Capital Inc. Jul 15 – Jun 18
Graphical Research And Computing Environment (GRACE)

- Designed and developed core infrastructure of the for team of data scientists for research and development, as well as sharing of datasets and predictive models for financial forecasting.
- Developed a fault-tolerant data flow system which enables fetching, processing, validation and analysis of data coming from different sources with complex inter-dependencies, utilized for updating financial time-series data.
- Added multi-language support (Python, Matlab, R, Julia) to the platform for defining computations, as well as the ability for creation of reports (Markup) for performance analysis of generated data and financial strategies.

Figitizer Jan 17 – Dec 17
Mentored an intern on an exploratory project to create editable, digital versions of flowcharts from images, using machine learning to detect individual components such as shapes and arrows.

Languages and Tools

Languages: Python, Java, C++, C, HTML, JavaScript
Tools and Databases: SVN, Git, Mongo, MySQL, Redis
Operating system: Ubuntu

Selected Projects

Automated Identification and Classification of Plankton Images Jan 15 – Apr 15
Built models for classification of sea-plankton images into 121 categories by using a training data of 30336 images distributed unequally across classes. The first approach used a Random Forest classifier with hand-crafted features as descriptors for capturing shape and texture based information. The second approach used Convolutional Neural Networks with processed images as input.

Legal Proposition Classification Jan 14 – Apr 14
Built text-classification models for classifying sub-parts of sentences (called propositions) in legal documents using Support Vector Machine and Naïve Bayes classifiers, and Stanford POS and NER taggers.

Game Design: Treasure of the Oasis Sep 13 – Nov 13
Developed a game using Panda3D (game engine), consisting of a virtual interactive oasis-farm environment, where the user finds hidden gemstones and a final treasure by navigating through obstacles.

Positions of responsibility

- Graduate Teaching Assistant (Grader) for COMPSCI 187 (Programming with Data Structures) at UMass (Fall 2018).
- Student Representative of the Gender Cell at DA-IICT (2014-15).
- Volunteer at Peoples Training and Research Center (Dec 2012).

Awards and achievements

- Successfully completed a high-altitude (16000ft) Himalayan trek to Roopkund.
- Won multiple folk dance competitions at Undergraduate level.
- Received 0.1 merit certificate in Mathematics in AISSCE 2008-09 (Top 0.1% of successful candidates nationwide).