Akshita Bhagia

https://akshitab.github.io

Education

- **University of Massachusetts, Amherst** — Amherst, MA
  Master of Science in Computer Science; GPA: 4.00/4.00 — *Sep 2018 – May 2020*
- **Dhirubhai Ambani Institute of Information and Communication Technology** — Gandhinagar, India
  Bachelor of Technology in Information and Communication Technology; GPA: 8.95/10 — *Jul 2011 – May 2015*

Relevant courses

Machine Learning, Neural Networks, Systems for Data Science, Deep Learning for NLP, Data Structures, Algorithms, Database Management Systems

Experience

- **Scripps Research Institute (Remote)** — Amherst, MA
  Graduate Student Researcher — *Jan 2019 - Present*
  Working on using probabilistic graphical models to improve crowd-sourced annotations for disease and phenotype identification in bio-medical text, in order to improve named entity recognition for the same.
- **InFoCusp** — Ahmedabad, India
  Lead Platform Development Engineer — *Feb 2018 - Jun 2018*
  Research Programmer — *Jul 2015 - Jan 2018*

  Graphical Research and Computing Environment
  - Developed a fault-tolerant data flow system which enables fetching, processing, validation and analysis of data coming from different sources with complex inter-dependencies.
  - 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
  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.

Programming Skills

- **Languages**: Python, Java, C++, C, HTML, JavaScript
- **Tools**: Ubuntu, Pytorch, Sklearn, GCE, Git, SVN, Mongo, MySQL, Redis

Selected projects

- **Human Protein Atlas Image Classification** — Sep 18 - Dec 18
  Python, Pytorch
  Built models for a multi-class, multi-label classification task to identify mixed patterns of proteins using ResNets.
- **Identification and Classification of Plankton Images** — Jan 15 - Apr 15
  Python, Sklearn, OpenCV
  Built classification models for sea-plankton images, experimenting with Random Forest classifier and hand-crafted features, and then, Convolutional Neural Networks.
- **Legal Proposition Classification** — Jan 14 - Apr 14
  Java, Weka
  Built text-classification models for classifying sub-parts of sentences (called propositions) in legal documents using Support Vector Machine and Nave Bayes classifiers, and Stanford POS and NER taggers.

Positions of responsibility

- Master's chair for CSWomen (Feb 2019 - Present).
- Graduate Teaching Assistant (Grader) for Programming with Data Structures at UMass (Fall 2018).
- Student Representative of the Gender Cell at DA-IICT (2014-15).

Awards and achievements

- Successfully completed a high-altitude (16000ft) Himalayan trek to Roopkund.
- Won multiple folk dance competitions at Undergraduate level.