Akshita Bhagia

https://akshitab.github.io
Machine Learning, Natural Language Processing, Deep Learning

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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, Deep Learning for NLP, Systems for Data Science, Data Structures

Experience

- **Cerebellum Capital** — San Francisco, CA
  Machine Learning Intern — *May 2019 - Present*
  Working on developing deep learning models for financial time-series forecasting using Keras and Tensorflow.
- **Scripps Research Institute (Remote)** — Amherst, MA
  Graduate Student Researcher — *Jan 2019 - May 2019*
  Used 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
  Engineered the core infrastructure for a data science platform to enable R&D as well as productization of financial datasets and models. Added multi-language (Python, Matlab, R, Julia) for defining computations, and a parallel execution architecture for processing data-flow chains with complex inter-dependencies.

  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 and libraries**: Ubuntu, Git, Pytorch, Keras, Tensorflow, Sklearn

Selected projects

- **Neural Machine Translation using Structural Linguistic Information** — Jan 19 - May 19
  Pytorch, SpaCY, torchtext
  Implemented a Transformer model for German-English translation. Achieved an improvement of 1.4 BLEU score by augmenting the transformer with linguistic information (BLEU - 28.8).
- **Human Protein Atlas Image Classification** — Sep 18 - Dec 18
  Pytorch, Python
  Built models for a multi-class, multi-label classification task to identify mixed patterns of proteins using ResNets. Accepted for the ACM Student Research Competition at Grace Hopper Conference 2019.

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

- Recipient of the Grace Hopper Conference Scholarship 2019.
- Successfully completed a high-altitude (16000ft) Himalayan trek to Roopkund.