

# Akshita Bhagia

<https://akshitab.github.io>

Machine Learning, Natural Language Processing, Deep Learning

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## EDUCATION

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- **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

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

## EXPERIENCE

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- **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 support (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 flowcharts from images using machine learning.

## PROGRAMMING SKILLS

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- **Languages:** Python, Java, C++, C, HTML, JavaScript
- **Tools and libraries:** Ubuntu, Git, Pytorch, Keras, Tensorflow, Sklearn

## SELECTED PROJECTS

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- **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 to the ACM Student Research Competition at Grace Hopper Conference 2019.

## POSITIONS OF RESPONSIBILITY

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- 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

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