

Saurabh Mathur

615 Woodbridge Drive,
Bloomington, IN
USA

+1 (812) 650-8527
saurabhmathur96@gmail.com

saurabhmathur96.github.io
github.com/saurabhmathur96
linkedin.com/in/saurabh-mathur-594589b2/

Education

- 2018–2020 **Indiana University, Bloomington**
M.S. in Computer Science
- GPA: 3.72 / 4
 - Thesis: Uncertainty estimation in deep learning
 - Advisor: David Crandall
- 2014–2018 **Vellore Institute of Technology**
B.Tech. in Information Technology
- GPA: 9.12 / 10
 - Thesis: Automated image captioning system
 - Advisor: Daphne Lopez

Publications

- Spring 2018 **Melanoma Detection using Capsule Networks**
Saurabh Mathur, Sumangali K. (ICNTET, 18)
- Spring 2018 **A scaled-down neural conversational model for chatbots**
Mathur S, Lopez D. (Concurrency and Computation: Practice and Experience)
- Fall 2016 **Classification of text documents using association rule mining with critical relative support based pruning**
P Karthik, M Saurabh, U Chandrasekhar (ICACCI, 16)
- Spring 2016 **Decision Making Using Fuzzy Soft Set Inference System**
U Chandrasekhar, S Mathur (ISBCC, 16)

Projects

- Fall 2019 **Rainfall Forecast**
· Predicting monthly rainfall in 500 districts across India using Sparse Gaussian Processes.
- Fall 2019 **Gutenberg Topic Models**
· Indexing 1,500 short stories with Nonparametric Bayesian methods.
- Spring 2019 **Semantic and Instance Segmentation**
· A study on the efficacy of deep image segmentation methods for robot navigation.
- Fall 2018 **Optical Character Recognition**
· Recognizing text in images using Bayesian unigram modeling and Hidden Markov Models.
- Fall 2017 **Clickbait Detector**
· A deep text classifier that tags clickbait on social-media with 90% accuracy (900 Users).
- Spring 2017 **VITacademics**
· Developed a backend-server to aggregate academic metrics (10,000 Users on mobile apps).

Research Experience

- Summer 2019 **Synopsys, Mountain View**
R&D Intern
- Developed a neural machine translation system to generate assertions from specifications.
- Spring 2019 **Indiana University, Bloomington**
Research Assistant for Prof. Roni Khardon
- Visualized 94,000 geotagged Irish folktales using Bayesian topic models.
- Summer 2016 **Microsoft, Bangalore**
R&D Intern
- Built a movie recommendation engine with an error-rate of 0.87 on the Netflix dataset.

Teaching Experience

- Fall 2019 **Associate Instructor, B551: Elements of AI**
Indiana University, Bloomington
- Designed assignments and developed autograding scripts.
- Spring 2019 **Associate Instructor, B456 Image Processing**
Indiana University, Bloomington
- Designed & graded assignments, conducted weekly lab sessions, and mentored projects.
- Fall 2016 **Workshop on Python Programming**
IEEE Computer Society, VIT Chapter
- Conducted a series of workshops on Python 3.
- Fall 2016 **Workshop on Game Development for the Modern Web**
IEEE Computer Society, VIT Chapter
- Conducted a 3 hour workshop on the HTML5 canvas element.
- Spring 2016 **Workshop on C++ Standard Template Library**
IEEE Computer Society, VIT Chapter
- Conducted a 2 hour introduction to the abstractions and algorithms provided by the STL.

Skills

- Programming: Python, C, C++, Java, JavaScript, MATLAB, R
- Databases: MySQL, MongoDB
- Tools: Bash, Latex