

# Udit Saxena

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## Education

**University of Massachusetts, Amherst, MA** Sept 2016 – Present  
MS in Computer Science, College of Information and Computer Sciences  
Coursework: Machine Learning, Systems for Data Science

**Birla Institute of Technology and Science, Pilani, India** Aug 2010 – Aug 2015  
BE (Hons.) in Computer Science, MSc (Hons.) in Mathematics

## Work Experience

**Sprinklr, Gurgaon, India** July 2015 – Aug 2016  
*Product Engineer, Core Team*

- Worked on deploying and integrating large scale social media analytics systems to leverage brand owned media and earned media for data driven insights across more than 20 different social networks.
- Designed and developed a Single Sign On solution using OpenSAML for Sprinklr as an Identity Provider to manage customer authorization sessions across multiple Sprinklr product lines.
- Administered API integrations of enterprise solutions - SAP C4C, SAP Hybris and other third party social networks - to allow customers to bridge compatibility issues or overcome cost of migration.
- Engineered REST-based API extensions to the core module and streamlined the core audit module.

**MLPACK, Google Summer of Code** May 2014 – Aug 2014  
*Intern, Core Contributor since May 2014*

- Implemented Multi-Class Adaboost algorithms - Adaboost.M1, Adaboost.MH and the Adaboost.SAMME.
- Added weak learning algorithms - Decision Stumps using template based splitting, and Perceptrons (single layer neural networks) for the boosting algorithms suite.

**Adobe Systems, Bangalore, India** Jan 2015 – June 2015  
*Intern, Adobe Captivate*

- Built the User Analytics feature to collect non-Personal Identity Information about Captivate users and setup a pipeline to clean, mine, analyze the data and provide insights for data driven decisions.

## Research Experience

**Multivariate Time Series Analysis - Real Time Gesture Recognition,** Aug 2014 - Dec 2014  
*Mentor: Prof. Navneet Goyal* BITS Pilani

- Built a model which accounts for the real time factor of most naturally occurring time series and is able to handle time series frame by frame, thereby recognizing an early stopping criterion for faster recognition.
- Achieved a recognition rate of 93 percent on the AUSLAN (Australian Sign Language) Dataset across 2300 instances and a recognition rate of 91 percent on the Daily Sports and Activities Dataset across 9000 instances using 5 fold stratified cross validation.
- Currently working on a paper on the same.

## Skills

- Java, C++, Python, MATLAB; Git, SVN; Linux; MongoDB, Elastic Search, MySQL

## Projects

**Wikipedia bot:** Wikipedia bot for vandalism detection. Given an edit of a Wikipedia article, the bot's task is to detect and flag ill-intentioned edits. Achieved an accuracy of 81 percent using SVM.

**Compiler:** Designed a complete functional compiler in Python for a toy language as a part of the course Programming Languages and Compiler Construction.