

Mayank Saxena

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EDUCATION

DELHI TECHNOLOGICAL UNIVERSITY (FORMERLY DCE)

B.TECH IN MATHEMATICS AND COMPUTING

Expected May 2018 | New Delhi, India
CGPA - 7.75 (Up to 6th semester)

LINKS

LinkedIn: [Mayank Saxena](#)
Github: [mayank26saxena](#)
Codechef: [mayank26saxena](#)

SKILLS

TECHNICAL SKILLS

Programming Languages:

• Python • C • C++ • Java • MATLAB • MySQL • \LaTeX • Javascript • R

Frameworks:

• OpenCV • TensorFlow • Django • Numpy • Pandas • Flask • Android SDK

COMPETITIONS

- **Airvolution 2017** - Shortlisted for on site finals in Kuala Lumpur, Malaysia, as one of 20 teams all over the world. Organized by Air Asia.
- **MHacks 8** - Shortlisted and participated in international hackathon conducted in Detroit by University of Michigan.
- **TechnoVision 2017** - Recieved best research presentation award for research on Prediction of Like Count of YouTube video amongst 20+ presentations.
- **Digital India Hackathon 2016** - Finished third amongst 9000 entries. Developed a Facebook Messenger Bot : Rescue Bot - India.
- **IndiaHacks 2016** - An international hackathon organized by HackerEarth. Ranked amongst top 20 submissions in two tracks (FinTech and e-Commerce).
- **HackNSIT 2016** - Developed 'Foodify' and won 2nd Runners up prizes.

COURSEWORK

• Discrete Mathematics • Stochastic Processes • Data Structures • Algorithms Design and Analysis • Graph Theory • Fuzzy Sets • OS • OOPS • Computer Vision • DBMS

EXPERIENCE

IBM INDIA RESEARCH LABORATORY | RESEARCH INTERN

Aug 2017 – Present | New Delhi, India

- Collected video data of trailers of all Bollywood Movies released between 2008-2017 and analyzed existence of gender stereotyping in them. The work was published on several leading websites.
- Worked under the guidance of Dr. Sameep Mehta and Nishtha Madaan.

CARNEGIE MELLON UNIVERSITY | RI SUMMER SCHOLAR

June 2017 – September 2017 | Pittsburgh, PA

- Developed a real time model for prediction of behavior actions in RoboTutor using affective state estimation. RoboTutor is a finalist for the 15M \$ Global Learning XPrize Competition.
- Worked under the supervision of Dr. Jack Mostow.

CUBE26 | SOFTWARE DEVELOPER INTERN

December 2015 – March 2016 | New Delhi, India

- Developed widget for frequent contacts as stock application for Karbonn Android Phones. All code was reviewed and pushed for production.
- Application and widget for finding out balance for prepaid connections.

PUBLICATIONS

- [1] **M. Saxena**, R. Pillai, J. Mostow, 'Relating Children's Automatically Detected Facial Expressions to their Behavior in RoboTutor', *AAAI* 2018
- [2] N. Madaan, S. Mehta, , **M. Saxena**, A. Aggarwal, T. S Agrawaal, V. Malhotra, 'Analyzing Gender Stereotyping in Bollywood Movies', *FAT** 2018
- [3] N. Madaan, S. Mehta, **M. Saxena**, A. Aggarwal, T. S Agrawaal, V. Malhotra, 'Bollywood Movie Corpus for Text, Images and Videos', *ArXiv*
- [4] **M. Saxena**, R. Pillai, J. Mostow, 'Student Behavior Analysis using Affective State Estimation in RoboTutor', *CMU RI Summer Scholars Journal*, 2017

PROJECTS

YOUTUBE LIKE COUNT PREDICTOR

Developed a Stochastic Gradient Descent Model to predict the like count of a given YouTube video. Project involved collection and cleaning of data, feature engineering, modelling and visualization of the data.

DETECTING INFLUENTIAL NODES IN A GRAPH

Implemented my own algorithm - Extended Neighbourhood Coreness Centrality. Results were comparable and better in some cases to Pagerank, Degree centrality and k-core centrality algorithms.

OFFLOW

Making data sharing possible through mobile devices without WiFi or mobile network using ultrasound waves. Developed under 36 hours at MHacks 8.

FOODIFY

App processes image of a food item, retrieves nutritional content, tracks nutritional content and also suggests recipes based on daily calorie limit goal.