

EDUCATION

Bachelor of Engineering (B.E.), Information Technology
Vivekanand Education Society's Institute of Technology
University of Mumbai, India

Expected May 2019
CGPA: 8.86 / 10

ACADEMIC PROJECTS

Social Champion Identification – Project Deep Blue (November 2017 – February 2018)

- Built an application with Python, Flask and MongoDB to identify social champions on Twitter as part of a citywide competition. Presented the solution as one of the top 8 among 250 teams at the Grand Finale.
- Visualised and processed the Twitter data of candidates using the NumPy, pandas and Matplotlib libraries. Employed Topic Modeling techniques (Latent Dirichlet Allocation, Probabilistic Latent Semantic Analysis) using the gensim and NLTK libraries to determine candidates' areas of interest. Quantified candidates' influence with the NetworkX library through Social Network Analysis techniques (Centrality, Homophily).

Disruption of Facial Recognition Systems – Senior Year Capstone Project (November 2018 - Present)

- Developed a Generative Adversarial Network that will attempt to get a trained face detector to misclassify the input images by altering specific pixels in the image.

Crowd-sourced Quiz Application (February 2018 – April 2018)

- Developed a web application with Bootstrap, Jinja, Flask and PostgreSQL to easily allow users to crowd-source diverse quiz questions from an online community on any topic. Built functionalities to enable users to curate a list of questions and to contribute quiz questions to existing topics.
- Implemented sentence similarity measures (Word2vec, GloVe) to detect duplicate quiz questions.

Crop Production Pattern Analyzer – BitCamp 2018 (March 2018)

- Participated as one of the top 25 teams nationally in a 24 hour hackathon to build solutions to problems faced by different sectors in India due to climate change.
- Wrote data analysis software to wrangle three datasets acquired from Kaggle and generate visualizations between annual crop production of major crops grown in all Indian states with temperature and rainfall measurements. Implemented Time Series Forecasting to predict crop production quantities.

WORK EXPERIENCE

Project Trainee – Mastek Ltd, Mumbai (June 2018 – July 2018)

- Developed an information bot with the Microsoft Bot Framework, QnA Maker and the Language Understanding Intelligence Service (LUIS) to answer questions on the company's HR policies.
- Built a dashboard with Node.js and MySQL to allow an administrator to update the bot on unknown questions and to automatically synchronize updates with the QnA Maker and LUIS services to instantaneously reflect changes across policies.

PUBLICATION

- U. Das, A. Narayanan, A. Gupta, O. Bagga and S. Chopra**, "Social Champion Identification for NGOs", *2018 2nd International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC)*, Palladam, India, August 2018 (To be published in IEEE Xplore).

CERTIFICATION AND TECHNICAL SKILLS

- Secured a position in the **top 1%** of students **nationally** in the NPTEL Online Course on 'Introduction to Operating Systems' (July 2017 - September 2017).
- Programming Languages:** Python, Java, C, C++, JavaScript, PHP, Node.js.
- Database Technologies:** MySQL, PostgreSQL, MongoDB.
- Frameworks and Operating Systems:** Bootstrap, Flask, Windows, Linux.

LEADERSHIP AND AWARDS

- Editor-in-Chief of the college's annual technical fest, Praxis (September 2017)** - Led and worked with the editorial committee to create the annual technical fest magazine.
- Editor, Computer Society of India student chapter (August 2016 - March 2017)** - Designed and edited the two annual magazines of the chapter. Collaborated with the council members to plan, organize and manage the technical events of the chapter.
- Workshop Coordinator (January 2018)** – Successfully organized and conducted a workshop on Python for junior undergraduate students in conjunction with the Spoken Tutorial Project, a Govt. of India initiative.
- Secured **first prize** in three group discussions and one debate conducted by the Indian Society of Technical Education college chapter, the college Entrepreneurship Cell and the college cultural council.