ABHIJEET DUBEY

Email: dubey.abhijeet09@gmail.com Website: github.com/dracarys09/ Phone: +91 9900190105

ACADEMIC DETAILS

Degree	University	Year	CPI / %
Post Graduation	IIT Bombay	2019	7.8 / 10
Graduation	IIIT Jabalpur	2016	8.4 / 10
Intermediate/+2	CBSE	2012	92.2 %
Matriculation	CBSE	2010	9.2/10

WORK EXPERIENCE

• Google Summer of Code

Software Development Internship, The Linux Foundation

(May 2017 - Aug 2017)

- Implemented a backend module (Google Cloud Print (GCP) Back-end) by wrapping Google Cloud Print API for Common Printing Dialog project under The Linux Foundation.
- The aim of this project was to provide unified printing from all applications on all available printers via all technologies that a user is using.
- GCP backend provides support for cloud ready printers which facilitate printing on Google Cloud Printers remotely.

• Oracle Corporation

Software Development Internship

(Jun 2015 - Nov 2015)

- o Designed and implemented a test suite to perform Smoke Testing of Oracle's SIM Software.
- Used Keyword based tabular testing tool Synergy to develop robust test suite and improved the overall coverage.

• Uddhat Softwares Pvt. Ltd.

Web Development Internship

(Jun 2014 - Jul 2014)

o Developed an online marketplace enabling freelancers to offer their services to users.

MASTER'S THESIS & RESEARCH PROJECTS

• Deep Models for Computational Sarcasm Detection & Interpretation

(Master's Thesis, Guided by Prof. Pushpak Bhattacharyya & Dr. Aditya Joshi (CSIRO, Sydney))

- Conducted a literature survey on various state of the art models for computational sarcasm detection and interpretation.
- Explored a specific type of sarcasm which arises due to numbers and implemented an Attention Network for detecting sarcasm due to numbers in tweets. This model performed significantly better than existing state of the art models and obtained a precision of **0.91**, recall of **0.92** and F-Score of **0.91**.
- Future work involves modelling additional context in the form of richer user embeddings to enhance the performance of sarcasm detection systems.

• Sarcasm Interpretation

(R&D Project, Guided by Prof. Pushpak Bhattacharyya & Dr. Aditya Joshi (CSIRO, Sydney))

- o Modelled sarcasm interpretation task as a monolingual machine translation problem.
- Implemented Sarcasm-SIGN algorithm using Moses for converting sarcastic utterances into their non sarcastic interpretation and obtained a BLEU score of **67.96**.
- Implemented a rule based approach by modelling sarcasm as a theory of dropped negation and obtained a BLEU score of 50.56.

SCHOLASTIC ACHIEVEMENTS

- Qualified for **ACM ICPC** Amritapuri Onsite Regionals in 2015.
- Awarded Certificate of Merit two times for exceptional academic performance during freshmen year and sophomore year.
- Was among top **0.3**% in GATE Computer Science 2016 among 1.08 lakh candidates.
- 1st place in Obfuscated 2015 (programming competition).
- Won Bronze Medal in National Round of iURL, held at IIT Bombay in March 2014.

ACADEMIC PROJECTS

• Headline Prediction from News Articles

(CS726: Advanced Machine Learning, Prof. Sunita Sarawagi)

- Implemented LSTM Network with Attention and trained our network on parallel corpora of news articles and their headlines.
- Used state of the art models like Google's Pointer Generator Network and Facebook's NAMAS.
- Best results were produced by Pointer Generator Network which produced a BLEU score of 31.3.

• Intelligent Carrom Playing Agent

(CS747: Foundations of Intelligent & Learning Agents, Prof. Shivaram Kalyanakrishnan)

- Implemented two models, Continuous Actor-Critic based agent and Deterministic Agent that can play carrom in both single player and 2 player setting.
- Best performing agent was able to clear the carrom board within 23 turns on average in single player mode.

• Music Generation Using LSTM

(CS753: Automatic Speech Recognition, Prof. Preethi Jyothi)

- Implemented LSTM model to synthesize music frames for Piano and Electronic Dance Music (EDM).
- Compared results of LSTM model with note based music synthesis and raw waveform based music synthesis models.

• Music Genre Classification

(CS725: Foundations of Machine Learning, Prof. Ganesh Ramakrishnan)

- Used classifiers like Decision Tree, Random Forests and Neural Network to classify music genres.
- Achieved **63.5**% accuracy using timbral features which was an improvement of **2.5**% over the original GTZAN Music Genre Classification Paper.

• Low Cost Solution for Car Heating Problem

(Fabrication Project, Prof. Saket Saurav)

- o A solar powered hot air exhaust system for commercial vehicles.
- A miniature device that triggers an exhaust system depending on the internal car temperature when car is idle.

TECHNICAL SKILLS

- **Programming Languages**: C, C++, Python, PHP, HTML, CSS, Javascript
- Tools & Frameworks: Git, LATEX, Beamer, Keras, PyTorch, Laravel, Django, Ansible

POSITIONS OF RESPONSIBILITY

• Research Assistantship, IIT Bombay (under Prof. D.B.Phatak)

(Jul 2016-Present)

- Responsible for mentoring a group of summer interns during May'17-Jul'17 and May'18-Jul'18.
- Responsible for writing deployment scripts of Collaborative Communities Portal using Ansible.
- Part of the interview panel and interviewed candidates for selection into Master's Program in IIT Bombay.

• Student Companion (ISCP, IIT Bombay)

(Jul 2017-Jun 2018)

- Mentored a group of five students by providing continuous help and support on both academic and non-academic fronts.
- **Assistant Coordinator** (*Student Counselling Services*, IIIT *Jabalpur*)

(Aug 2014-July 2015)

- o Mentored a group of 5 undergraduate students during their sophomore year.
- **Student Guide** (Student Counselling Services, IIIT Jabalpur)

(Aug 2013-Jul 2014)

 $\circ~$ Mentored a group of 5 undergraduate students during their freshmen year.

INTERESTS AND HOBBIES

• Weigtlifting, World Cinema, Playing Guitar.