Somin Wadhwa

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EDUCATION

Bachelor of Technology in Computer Science & Engineering

Maharaja Agrasen Institute of Technology

CPI: 79.2%

Guru Gobind Singh Indraprastha University, Delhi, India

RECENT EXPERIENCE

• Indraprastha Institute of Information Technology, Delhi (IIIT-D)

Research Intern
Complex Systems Lab, Center for Computational Biology

July, 2018 - Present June 2017 - March 2018

Advisor: Dr. Ganesh Bagler

- Current Work: My current work focuses on creation of "BitterSweet: A resource to explore and predict taste information in small molecules". (http://cosylab.iiitd.edu.in/bittersweet)
- Previous Work: During my undergraduate studies, we worked on devising new methods to
 predict phenotypic side effects of drugs using existing data (SIDER4). The work was culminated
 in the form of a research article and the code was documented & open-sourced on Github (<u>link</u>).
- All India Council for Technical Education (AICTE), Govt. of India Research & Development Intern October

Advisor: Dr. N.H. Siddalingaswamy (Director, AICTE)

October 2017 - March 2018

- Work: Lead a team of 5 and with a project budget of \$4600. We analysed AICTE's employment statistics dataset and developed dynamic analytic dashboards to aid AICTE in granting approvals to higher education institutions.

Publications

Wadhwa S, Gupta A, Dokania S, Kanji R, Bagler G (2018) A hierarchical anatomical classification schema for prediction of phenotypic side effects. PLOS ONE 13(3): e0193959. https://doi.org/10.1371/journal.pone.0193959

SELECTED PROJECTS

All of my projects (including the following ones) are be available on github.com/sominwadhwa

<u>Visual Question Answering through Modal Dialogue</u>: A two semester long B.Tech project based on the application of *Malinowski et al.* on v2 of the <u>VQA</u> dataset. Documented and made the entire process reproducible in the form of a featured blog post.

Kaggle-Repository*

A collection of kernels (written in IPython Notebooks & scripts) designed from datasets obtained from Kaggle for practise as well as competitions. These include implementations of typical Machine Learning algorithms on a range of datasets.

TheTwitterPolice

Analysis of law enforcement activity on Twitter in India. Collected data from five different police social handles (BeautifulSoup & Selenium), stored them in a database (MongoDB), analysed (sentiment-analysis, time-series etc) & displayed the results graphically in the form of a web-app (flask application deployed on heroku).

OTHER ACTIVITIES

- Won Smart India Hackathon (April 2017) I was the Team Lead of a six-member team under the mentorship of Dr. Sambuddha Roy over a period of three months to build a decision support system using Machine Learning to improvise AICTE's handbook approval system for technical institutions in India for SIH 7200+ teams pan India competed in a 36-hour Hackathon organised by Government of India. As a part of the winning team for AICTE, I'm associated with All India Council for Technical Education (Ministry of Human Resources & Development, Government of India) in a fully funded project (Budget: 2.93L) for taking our prototype forward over the period of 6-8 months beginning October 2017.
- Secretary (2015-2016) 'Association of Computing Machinery (ACM)- Student Chapter' at M.A.I.T
- Presentation Gave an oral talk on, "Study of Random Numbers & their applications in computational physics using Monte-Carlo method" at the 27th IUPAP Conference on Computational Physics, IIT Guwahati on 2-5 December, 2015.

- Interned at a national NGO 'Umeed A drop of Hope' (NGO Reg: S/792/DIST.SOUTH/201) and participated in Project- Knowledge for All (KFA).
- Rotaractor (2014-2015) Member of 'Rotaract Club of Delhi Akash' where our team jointly organized several large scale events like 'CanSupport's Walk of Life (8th Feb 2015) Fight against cancer.', 'Patrika A paper recycling drive.'