## Somin Wadhwa

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EDUCATION

Bachelor of Technology in Computer Science & Engineering2014 - 2018Maharaja Agrasen Institute of Technology, G.G.S.I.P Univ., Delhi, IndiaCPI: 79.2%

RECENT EXPERIENCE

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

Research Intern

Complex Systems Lab, Center for Computational Biology

Advisor: Dr. Ganesh Bagler

July, 2018 - Present

June 2017 - March 2018

- 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 (code).
- All India Council for Technical Education (AICTE), Govt. of India

  \*Research & Development Intern\*\*
  October 2017 March 2018

  \*Advisor: Dr. N.H. Siddalingaswamy (Director, AICTE)
  - 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. (code)

**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 available on github.com/sominwadhwa

- Visual Question Answering through Modal Dialogue: A semester long B.Tech project based on the application of <u>Malinowski et al.</u> (Ask Your Neurons) on v2 of the <u>VQA</u> dataset. Documented and made the entire process reproducible in the form of a featured blog post. (code)
- Kaggle Repository: An ongoing (2+ yrs) collection of kernels (in IPython notebooks) designed using datasets obtained from Kaggle for practise & competitions. (github-repo, kaggle profile)
- The Twitter Police: Basic analysis & visualization of Indian law enforcement activity on Twitter. Collected data for different cities (Beautiful Soup & Selenium), stored them in a database (Mongo DB), analysed (sentiment analysis, basic statistics etc) & displayed the results graphically through a flask web-app. (code)

SKILLS

- Languages & Frameworks: Python, Java, Bash Scripting, SQL. Tensorflow, Keras, Scikit-Learn, Spacy, NLTK, Pandas, NumPy, SciPy, Matplotlib, Plotly, MongoDB, Flask
- Relevant Classes Taken: Algorithm Design & Analysis, Machine Learning, Advanced DBMS, Data Structures, Probability & Curve Fitting (Applied Mathematics-IV)

ACHIEVEMENTS & OTHER ACTIVITIES

- Smart India Hackathon 2017, MHRD, Govt. of India: Led a team of 6-members advised by Dr. Sambuddha Roy (Principal Data Scientist at Microsoft, Seattle) & won first prize with a total cash prize of \$3000 awarded by Government of India and MAIT.
- Best B.Tech Project: Awarded to the top 4 major projects by the CSE department at MAIT.
- Outstanding Achievement Award: Conferred by the CSE department at MAIT among 180 students (batch of 2018).
- Secretary, Association of Computing Machinary: Served in the capacity of Secretary of 80+ strong team of ACM-MAIT Student Chapter during 2015-2016.
- **Blogging**: Maintain an active blog at *sominwadhwa.github.io/blog* to document some of my experiences & selected projects (for reproducibility).