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Somin Wadhwa

Contact Information

E-mail: sominwadhwa@gmail.com
Homepage: sominwadhwa.github.io
GitHub/Kaggle: /sominwadhwa
LinkedIN: /in/sominwadhwa

Education

Bachelor of Technology in Computer Science & Engineering 2014 – 2018
Maharaja Agrasen Institute of Technology, G.G.S.I.P Univ., Delhi, India *CPI:* **79.2%**

Recent Experience

- **Indraprastha Institute of Information Technology, Delhi (IIIT-D)**
  Research Intern July, 2018 - Present
  Complex Systems Lab, Center for Computational Biology 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 (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 two semester long B.Tech project based on the application of *Malinowski et al.* on v2 of the VQA 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)
- **TheTwitterPolice:** Basic analysis & visualization of Indian law enforcement activity on Twitter. Collected data for different cities (BeautifulSoup & Selenium), stored them in a database (MongoDB), 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, Pandas, NumPy, 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).