

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 Maharaja Agrasen Institute of Technology Guru Gobind Singh Indraprastha University, Delhi, India	2014 – 2018 CPI: 79.2%
RECENT EXPERIENCE	<ul style="list-style-type: none"> Indraprastha Institute of Information Technology, Delhi (IIIT-D) <i>Research Intern</i> Complex Systems Lab, Center for Computational Biology Advisor: Dr. Ganesh Bagler – Current Work: My current work focuses on creation of <i>“BitterSweet: A resource to explore and predict taste information in small molecules”</i>. (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 (link). All India Council for Technical Education (AICTE), Govt. of India <i>Research & Development Intern</i> 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. 	July, 2018 - Present June 2017 - March 2018 October 2017 - March 2018
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	VQAMD A semester long project based on the Virginia Tech’s VQA (Version 2). Idea is to design a CNN + LSTM based model whose outputs are passed through a fully connected followed by softmax layer to improvise the overall accuracy on v2 release of VQA. The entire methodology is documented under a blog- Visual Question Answering through Modal Dialogue 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). Image Apportionor A simple clustering based image segmentation in Python. Implemented k-means clustering for segmentation & achieved a compression ratio of approximately 6. <i>*Ongoing</i> All my projects (above included) are available on GitHub	
OTHER ACTIVITIES	<ul style="list-style-type: none"> 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.'