Chetan Chawla

New Delhi, India | Web: sites.google.com/view/chetanchawla ☐ | chetanchawlacc4@gmail.com ☐

EDUCATION

Bharati Vidyapeeth's College Of Engineering, New Delhi

Undergrad, Electronics & Communication Engineering • 89.4% • 2015-2019 • Best Student Award

Kendriya Vidyalaya Tagore Garden, New Delhi

AISSCE, CBSE Board (XII) • 95% • Positioned in top 1.5% KVS India

COURSEWORK

• External: Code/Astro'21 ♂ Intro-to-Astro 2020 ♂ , Astronomy: Exploring Time and Space ♂ , Data-Driven Astronomy ♂ , Astrosprint'21 ♂

• Undergrad: Applied Physics I-II, Applied Mathematics I-IV, Electromagnetic Field Theory, Signals and Systems, Digital Signal Processing, Optical Comm., Antenna & Wave Propagation, Satellite Comm.

VOLUNTEERING & OUTREACH

- Mentor: Intro to Astro 2021
- Mentor: Astrosprint 2021
- PyData Global'20, 21 🗷
- Co-organizer at PyData Delhi 🗷
- Vice-Chairperson, IEEE (BVP)
- Conference Chair, InnoviCon 2019
- Organizer, WIEHack 2018 ♂

AWARDS

- Project Champions 2019, 2020-ZS
- J.K. Pal Memorial- Best Student Award, IEEE Delhi Section (R10)
- Celestini Prize India 2017, Marconi 🗷

TECHNICAL SKILLS

Proficient

- Python SQL/ADQL Unix Shell
- \bullet C \bullet LATEX \bullet Git \bullet Topcat

Familiar

 \bullet C++ \bullet HTML \bullet Lua \bullet Android (XML and Java) \bullet MATLAB

Python Libraries

- MoonPy astropy wōtan pandas
- radvel lightkurve matplotlib
- pyMC tensorflow keras

EXPERIENCE

ACADEMIA SINICA IAA, TAIWAN ☑ | Research Intern

07/21-Present | Remote

Supervisor: Dr. Alex Teachey ☐

• Identifying planet candidates in Transiting Exoplanet Survey Satellite's (TESS) Continuous Viewing Zone. Achieved $\sim 93\%$ accuracy on the test-set with the developed pipeline. [Talk]

ZS ASSOCIATES □ | Business Technology (Data) Analyst 06/19-01/21 | New Delhi

- Development, Testing and Deployment of 1-click end-to-end systems for pharmaceutical sales alignment using SQL, Unix & Tableau.
- \bullet Automated systems like textual insights generation, data or chestration & processing, and automatic backup-deletion.

IIT DELHI | Summer Research Intern

06/18 - 08/18 | New Delhi

Mentor: Prof. Brejesh Lall ♂ (E.E. Dept)

• Implementing neural network based pedestrian trajectory prediction and optimising multi-object tracking algorithms for vehicle dashboard cameras on self-developed Indian road dataset. [Report]

MARCONI SOCIETY - CELESTINI ☑ | Summer Research Intern 06/17 - 07/17 | IIT Delhi Mentor: Dr. A. Chowdhery ☑ (Google Brain)

• Prototyped and tested collaborative driver assistance system with real-time networking of sensory data from vehicles. [Video]

PUBLICATIONS

IDENTIFICATION OF PLANET CANDIDATES IN FULL-FRAME IMAGES FROM THE TESS CONTINUOUS VIEWING ZONE

Journal Paper: In Preparation

Authors: C. Chawla and A. Teachey

Paper to be submitted to Monthly Notices of Royal Astronomical Society

POSTER: DRIZY: COLLABORATIVE DRIVER ASSISTANCE OVER WIRELESS NETWORKS ☐

Conference Poster: 2017

Authors: N. Garg, I. Janveja, D. Malhotra, \underline{C} . Chawla, P. Gupta, H. Bansal, A. Chowdhery, P. Mukherjee, B. Lall [pdf] \Box [poster] \Box

Proceedings of 23rd Annual International Conference on Mobile Computing and Networking, MobiCom'17, ACM, NY, USA, 546–548.

AQUACOM: UNDERWATER VISIBLE LIGHT COMMUNICATION

Conference Paper (Paper ID: 2738) ☐

Authors: I. Janveja, N. Garg, <u>C. Chawla</u>, J. Parikh

[pdf]♂

In Proceedings of the 12th INDIACom; INDIACom-2018; IEEE

Conference ID: 42835

PROJECTS

- In Prog | Identifying stellar cluster memberships with Gaia
- (06/21) | Gaia Lightcurves fetching open-source package ☐
- (08/20) | Proposal: Exoplanet Transit Vetting using RNN ☐
- (04/19) | Drone navigation ☐ & Multispectral Crop Analysis ☐
- (09/18) | Wildfire SOS ☐ and evacuation assistance system ☐
- (01/18) | Music Generation Using Deep Learning ☐
- (03/17) | Synchronous path planning for Mars rovers □