



Pradyum Soni
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Graduation Year: 2021
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PROFESSIONAL EXPERIENCE

MACHINE LEARNING INTERN | Nuclei Technologies | **Awarded LOR** [28 Jul'20 – 28 Sep'20]

MENTORING	▪ Allotted 40 mentees for 2 projects, Improved Best Kaggle ranks of mentees to 1.5k
CONTENT	▪ Delivered 20 topic's content for LIVE project; ML & Statistics course development

PROJECTS COMPLETED

STATE ESTIMATION PROJECT | Prof. Mani Bhushan | Python_3 | [Github Link](#) [Aug'20 - Dec'20]

PURPOSE	Simulate Williams Otto Reactor (3 simul reactions) & Estimate Unmeasured States
METHODS	Kalman filter ; EKF; Euler Integration; Perturbation of Inputs & Gaussian Noise
EVALUATION	Plots : States, Spectral Radii, Innovation, Estimation error; Values : RMSE; NEES

DESIGN PROJECT | Ethylene Oxide | Prof. RKM & JB | DWSIM | (5 members) | [Drive Link](#) [Jan'21 – Apr'21]

PURPOSE	RnD on ETO plant setup; Present end-to-end solution w.r.t plant development
METHODS	Market Survey, Read Patents, Develop PFD, Material Balances, DWSIM Simulation
EVALUATION	Weekly Evaluation for 8-9 weeks by 2 professors including Report & Presentation

SELF PROJECTS | Kaggle Projects | Prototype Web App (Insurance Cost Web App: [Link](#)) [Mar'20 – Aug'20]

Insurance Cost	Predicted Medical Insurance Cost by Lasso Regression & deployed model on Heroku
Call Drop Category	No Github Solution available; Predicted Call Drop Category: Multi-Label Classification

COURSE PROJECTS | Report-Based Course Projects [Apr'21 – Aug'21]

Micro-Tweezers	Prof. Rohit; Novel approach, Fabrication, Mask Layout, Design, Packaging & Testing
Chemical Process	Prof. Jogwar; Performed Detailed level 5 design on Styrene Manufacturing

POSITIONS OF RESPONSIBILITY

CAPTAIN | CULTURAL MEET 4.0 [Nov '19 - Dec '19]

Represented IIT Bombay for 5 competitions under dramatics genre & Improv comedy among 21+ IITs participating

ROLE	▪ Responsible to build 5 teams ; Supervise production requirements using budget of 0.1Mn
IMPACT	▪ First position in Improv; Overall First-Runner Up as part of 15+ team, leading 200 students

HOSTEL ALUMNI SECRETARY | HOSTEL 9 | STUDENT ALUMNI RELATIONS CELL [Jul'18 - Jun'19]

Part of 25+ membered H9 council; Part of 15+ membered team in SARC

ROLE	▪ Drafted HATS report, hostel wish list targeting an approximate budget of 0.3Mn ▪ Organized Silver Jubilee Reunion; Conducted H9 Alumni visit for flagship event: Alumination
IMPACT	▪ Air-Conditioned Study Room Project was started for H9 students with appropriate budget

EXTRACURRICULARS

TECHNICAL SKILLS	▪ C++; Python3; MS Office; MATLAB; DWSIM
ONLINE COURSES	▪ Certified Python Data Science Professional – IBM (4 courses & Project) ▪ Fundamentals of Statistics – MITx ; Using python for Research - Harvardx
AWARDS	▪ Hostel Special Mention'19 & Hostel Cultural Color'20 in Culturals ▪ Bagged 5th position in SPGC; Directed the 10+ team for 60+ hours ▪ Performed in PAF'19, '20; First in MDGC'19; Written & Directed MDGC'20
NOVELS & FOUNTAIN PEN	▪ ("King-killer Chronicles") – RothFuss ; ("Stormlight Archive") – Sanderson ▪ Fountain pen aficionado – Regalia writing labs, Nakaya Lacquer, MB 149