Adarsh Kumar

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EDUCATION

Qualification	Year	Institution	Grade
B. Tech. (Engineering Physics)	2021	Delhi Technological University (Formerly DCE)	7.81 GPA
C.B.S.E. (Class XII)	2016	S.B.V, Naraina, New Delhi	88.6%
C.B.S.E. (Class X)	2014	S.B.V, Naraina, New Delhi	9.2 CGPA

ACADEMIC PROJECTS

Amazon Top 50 Bestselling Books 2009 - 2019 March '21

- Exploratory Data Analysis (EDA): Analysed the dataset of Amazon Top 50 Bestselling Books using key functionalities like pivot table, data visualization, etc.
- Driving meaningful insights using key parameters like the categorization of novels basis various metrics like financial affordability, genre, book reviews, etc.
- Suggested various other ways in order to drive sales like e-books and increment in non-fiction genre as it has potential leads.

Effect of Process Parameters on CNTFET *Aug '20- Mar '21*

- Analyzed the impact of process (plasma) parameters **on CNTs (Carbon nanotubes)** that the increase in the density and temperature of acetylene ion results in a radius of the conical CNT tip increases, this results in higher Id current and better performance of CNTFETs.
- Simulated and analyzed the impact of **CNTs (Carbon nanotubes)** diameter, with an increase in diameter from **1nm to 4nm,** the **on-current (Ion)** increases by **more than 80 times,** mobility by **6 times** and carrier density by **more than 2000 times.**

Modified Booth's Multiplier Aug '20- Sep '20

- Implemented multiplier for multiplication of two binary numbers using a **modified booth algorithm (Radix-4)** and coded in Verilog.

ACADEMIC ACHIEVEMENTS & EXTRA-CURRICULAR ACTIVITIES

- Rewarded the Lal Bahadur Shastri Scholarship by the state government for excellence in academics.
- Secured 3rd position in Bhartiya Sanskriti Gyan Pariksha.
- School topper in class 10th and 12th.

CERTIFICATIONS

- Google Data Analytics Professional Certificate (Completed 6 courses)
- Excel: Advanced Formulas and Functions
- Tableau Essential Training
- Programming for Everybody (Getting started with Python)

SKILLS

Programming Languages: C, Python, MATLAB, SQL
Software & Libraries: MATLAB**,** MS Excel, MS word, MS PowerPoint, Tableau, NumPy, Pandas

INTERNSHIPS

Summer Intern, ***Applied Physics, DTU, Delhi*** Jul '20-Aug '20

- Reviewed research papers and models for performance and efficiency of CNTFETs (Carbon nanotube field-effect transistors) for different parameters.
- Simulated and analysed the impact of CNTs (Carbon nanotubes) diameter, with an increase in diameter from 1nm to 2nm, the on-current (Ion) increases by 60-70 times.
- Overall performance is increased by 3 times compared to MOSFETs.

Research Intern, ***Defence Research & Development Organisation (DRDO), Delhi*** Dec '18-Jan '19

- Worked under the SSPL-MEMS division to provide essential science and technical research & development information rapidly, accurately, and reliably to support DRDO scientist's needs.
- Designed and simulated Class B Amplifier for higher efficiency and reduced crossover distortion by the use of op-amp as a negative feedback op-amp.