DEBMALYA SUR

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EDUCATION

Indian Institute of Technology, Dhanbad (IIT Dhanbad)
Master of Technology in Computer Science and Engineering | CGPA : 9.26 $2022 - 2024$

Government College of Engineering & Ceramic Technology, Kolkata
Bachelor of Technology in Computer Science and Engineering | CGPA : 9.87 $2018 - 2022$

SKILLS

Business Skill	Data Analysis and Interpretation, Digital Marketing, Market Research, Project Management
Technical Skill	C++, C, Python, DSA, REST API, Backend, Problem Solving, Agile Development

WORKING EXPERIENCE

Senior Engineer @ Samsung Research Institute Bangalore (SRIB)   July 2024 - Current
Currently I am working with On Device AI team in SRIB as senior engineer.

Research Intern @ Samsung Research Institute Bangalore (SRIB)   June 2023 - Aug 2023

- I have worked with the OnDevice AI team on the technology Render Thread Optimization.
- I worked on the texture optimization because if it can increase the user experience & came up with an algorithm which uses Huffman Encoding and which has a compression ratio of 93%.

BUSINESS PROJECTS

- **Strategic Meta Marketer @ KD Collecsions.** KD Collecsions is an American Diamond jewellery startup. There I worked as the strategic meta marketer with the object to grow their meta page with constraint budget. Successfully run the engagement ads with 338K reach, 21 rs CPM and 550K impression.
- **CMO @ Astro Vastu Counselling.** Astro Vastu Counselling is a service-based astrological startup which is currently in its initial phase. I am working with the brand closely and helping them for the social media marketing as well as business decisions.

TECHNICAL PROJECTS

- **Baud News.** Built an user-specific news web application. News are sent in the personalized manner.
- **Smart Attendance System.** Built a ML based IoT project to automate the attendance taking procedure.

RESEARCH WORK

A Clustered Federated Learning approach for non-Independent and Identically distributed data (communicated to journal of *Engineering Applications of Artificial Intelligence* under *Elsevier* publication) –

- Contributed on the emerging technology Clustered Federated Learning under the domain of Internet of Medical Things (IoMT), where the non-IID data is the most relevant data.
- The objective of this research was to contribute an architecture which would be communication efficient and scalable as well as works efficiently for non-IID data.
- The research work concluded its findings after successfully executing an extensive testing on synthetic dataset.

ACHIEVEMENTS

- GATE CS AIR 405 on 2022.
- Written and published book on C Programming Quick Start. Also I own the copyright to this book.
- AIR 4th in Theory of Computation NPTEL examination, 2021.
- Secure 127th rank in SEAMO, 2017 from South East Asia region.