SIVARAJ B K

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EDUCATION PROFILE

Year	Degree	Institution	CGPA / %
2027*	MTech Materials Engineering	Indian Institute of Science, Bengaluru	**9.33***
2023	BTech Metallurgical and Materials Engg	National Institute of Technology, Trichy	**9.33**
2019	CBSE Class 12 (PCM-CS)	Kendriya Vidyalaya 1, Trichy	**97 %**

AWARDS / RECOGNITIONS

- Secured **All India Rank 7** in GATE Metallurgical Engineering Paper 2025 (GATE 25 MT Score : 889)
- Secured **B Tech Rank 3** at the Dept of Metallurgical and Materials Engineering, NIT Trichy in 2023
- Received the **KVS National level cash award** for the **top 1.5%** students in the Class 12 Exam 2019
- Received the **KVS Merit cash award** for obtaining a CGPA of **10 /10** in the Class 10 Exam in 2017

WORK EXPERIENCE

- **Manager – Primary Steel Making, Tata Steel Limited, Jamshedpur**: Jul 2023 - Dec 2024
  Supervised a 4 MTPA steel production shop with 3 BOFs for automobile and structural grades. Completed projects on converter lining life improvement and reducing gouge marks in rolled sheets.

PROJECTS / INTERNSHIPS

- **Corrosion Analysis of SLS Alloys - Guided by Prof Sivaprasad K, NIT Trichy:** Jan 2023 - Jun 2023
  Analysed the corrosion behaviour of Selective Laser Melted (SLS) AlSi10Mg and 18Ni-300 alloys using Electrochemical Impedance Spectroscopy and correlated the results with surface phenomena.
- **Tata Steel Internship - Guided by Mr YSN Murty, Head-CRM, TSL Khopoli:** May 2022 - July 2022
  Worked on "Stabilizing roll texturing parameters for skin panel". Using Ishikawa RCA method, the prominently impacting parameters were identified and limits were described for skin pass roll texture.
- **Cellular Automata - Guided by Prof Sukanta Das, IIEST Shibpur (Online):** Jun 2021 - July 2021
  Explored the applications of Cellular Automata (CA) in classification and random number generators. Completed a project on "Pattern classification", and published a paper in the first ASCAT conference.
- **Metal Additive Manufacturing – Guided by Prof Karthik V, NIT Trichy:** May 2021 - Dec 2021
  Simulated the residual stress developed during Metal Additive Manufacturing of simple geometries, and the identified the effect of parameters. Notable software used are Fusion 360, Simufact Additive.

ACADEMIC PUBLICATIONS

- **Book chapter:** Computational Modelling of Additive Manufacturing - Overview, Principles, and Simulations in Different Scales, *Additive Manufacturing with Novel Materials (2024)* (*Link for chapter*)
- **Conference paper:** Exploring Reachability Tree for Non-uniform Cellular Automata Under Open Boundary Conditions, ASCAT 2022, *Journal of Cellular Automata (2023)* (*Link for paper*)

TECHNICAL SKILLS

- **Programming Languages** : Python (NumPy, SciPy Packages), C++
- **Additive Manufacturing** : Fusion 360, Simufact Additive, Cura
- **Comp. Materials Modelling** : LAMMPS, OVITO, Quantum-Espresso
- **Other Relevant Software** : LaTeX, Mendeley, Adobe Photoshop