

VIKAS MAHENDAR

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EDUCATION

Duke University - *Master of Engineering Management*

Aug. 2023 - Dec. 2024

- GPA 3.925/4.0 • Finance • Marketing • Challenges in Design Thinking • Designing Customer Experiences

Indian Institute of Technology, Madras - *Integrated Bachelors in Mechanical Engineering & Masters in Robotics*

- GPA 3.69/4.0 • Minors in Computing • Minors in Artificial Intelligence

Jun. 2018 - Jun. 2023

WORK EXPERIENCE

Albert Invent - *Student Consultant - Technical Product Manager*

Aug. 2023 - Dec. 2023

- Introduced ML-based sustainability scoring for R&D, streamlining chemical formulation assessment for engineers.
- Led a team of 6 in comprehensive market research, identifying key sustainability metrics through user interviews.
- Utilized agile methods to execute full-scale project plans, concurrently preparing Business Requirement Document (BRD).
- Spearheaded model integration & executed API marketplace strategy, **achieving 18% accuracy** boost in green scores.

Microsoft Research - *Undergraduate Research Intern*

Sept. 2021 - Nov. 2022

- Pioneered the design of online visual search, by introducing “DeepSIFT” – a novel feature ensuring robust performance.
- Collaborated with cross-functional teams to optimize enterprise-integration, **boosting inference speeds by 6%**.
- Proposed paradigm which outperforms state-of-the-art techniques **by 16% in 9 benchmarks**, was submitted to **CVPR’23**.

Kotak Mahindra Bank - *Product Intern*

May. 2022 - Aug. 2022

- Applied Knaflc-style data visualization to discern user purchase behavior through Gephi, revealing network connections.
- Designed and implemented an ML model that predicts users’ propensity to purchase banking products with **94% accuracy**.
- Identified the optimal marketing channel for each user, maximizing response rates to marketing campaigns **by 12%**.
- Benchmarked using A/B testing on real-world data, resulting in a remarkable **3% increase** in revenue for the company.

AIDesign Pvt Ltd - *Product Developer & Founding Member*

May. 2019 - Feb. 2021

- Co-founded and led the startup focused on using data-driven techniques to replace inefficient FEA-based CFD techniques.
- Developed a neural network, that reduced computational overhead **by 63%** whilst achieving **98% accuracy**.
- Prototyped SaaS, performed troubleshooting, conducted pre-collaboration business analysis with **Mercedes & Boeing**.

IBM Research - *Research Collaboration*

Nov. 2020 - Jan. 2021

- Led a cross-functional team in the development of a link-prediction model using GNNs for analyzing social networks.
- Integrated advanced visualization techniques to enhance interpretability, allowing stakeholders to gain actionable insights.
- Presented our findings at the *ICML 2021 Workshop*, communicating the impact of our work to a wider audience.

POSITION OF RESPONSIBILITY

Teaching Assistant - *Finance-Duke University & Machine Learning-IIT Madras*

Aug. 2022 - May. 2023

- Conducted weekly classes and office hours, while maintaining class dynamics, attendance, and logistical aspects.
- Contributed to the development of the curriculum and meticulously handled assignment and exam grading.

Head of Student Body - *IIT Madras : Placement & Internship Team*

May. 2021 - May. 2022

- Led a team of **15 coordinators**, served as the point of contact for **150+** companies and handled a **1300+** student body.
- Succeeded by producing **178 offers** amidst the COVID-19 recession by orchestrating **7 career-fairs** throughout the year.

Karams Solar Design Pvt. Ltd. - *Project Manager*

Mar. 2020 - May. 2021

- Led and managed a cross-functional **team of 15 engineers** and responsible for drafting both BRD and FRD.
- Collaborated with **OnSwitch**, to generate solar web-quotes by scraping and annotating data from aerial satellite images.
- Created FIGMA wireframes to improve UI, boosting stakeholder feedback **by 15%** with timely status communication.
- Generated an annual turn-over of **INR 15 Lakhs** & was recognized by Naascom for other socially-impactful projects.

PUBLICATIONS

- Deployment and Explanation of Deep Models for Endoscopy Video Classification - *DAI 2023* [Paper]
- DeepSIFT: Rethinking Domain Generalization via Invariant Input Representations - *CVPR 2023* [Paper]
- Real Electrical Signals to Text - *IJARIT 2021*

SKILLS

Technical: Python, C, C++, SQL, R, Git, BigQuery, Jira, Figma, Trello, Tableau, MS Office, PowerBI, GCP, AWS, Azure
Business: Agile Methodology, Scrum, Data Analysis, Data Visualization, Business Management, Project Management