K VIKAS MAHENDAR

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EDUCATION

Duke University 2023 - 2025

Master of Engineering Management

 \diamond Finance \diamond Marketing \diamond Product Management in High-Tech Companies.

Indian Institute of Technology, Madras

2018 - 2023

Dual Degree - Bachelors in Mechanical Engineering + 1 year Masters in Robotics (Deep Learning & AI)

♦ Minors in Computer Science

WORK EXPERIENCE

Microsoft Research - Undergraduate Product Research

Sept 2021 - Nov 2022

- Developed a mechanism that improves the robustness of current vision-based models to diverse deployment environments.
- Proposed method, which mimics human-vision, outperforms existing methods by at least 10% in accuracy in several benchmarks.
- Proposed method, which I co-first authored, has been compiled as a research paper and submitted to CVPR 2023.

Kotak Mahindra Bank - Product Intern

May 2022 - Aug 2022

- Analyzed users' online and social media footprints to create a comprehensive understanding of their preferences and behaviors.
- Designed and implemented a machine learning model that accurately predicts users' propensity to purchase banking products.
- Added the ability to identify the optimal marketing channel for each user, maximizing response rates to marketing campaigns.
- Benchmarked using controlled 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 - Jan 2021

- Co-founded and led the startup focused on using data-driven techniques to solve complex engineering problems.
- Developed a ML framework for simulating complex scenarios, achieving million-fold speed improvements over conventional methods.
- Developed a prototype that attracted attention from media and investors resulting in partnerships and investment opportunities.

IBM Research - Software Development Intern

May 2020 - Aug 2020

- Developed an interpretable link-prediction model using graph-neural-networks for analyzing social networks.
- Added the ability to visualize semantically relevant structures to provide insights into errors of faulty GNNs.
- The work has been compiled and submitted as an extended abstract at ICML 2021 Workshop on Explainable AI.

LEADERSHIP EXPERIENCE

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 streamline solar installation processes by scraping and annotating data from aerial satellite images.
- Generated data reports using Tableau & reduced turnaround times by a significant margin, enhancing efficiency.
- Generated an annual turn-over of INR 15 Lakhs & was recognized by Naascom for other socially-impactful projects undertaken.

Head of Student Body - Placement & Internship Team, IIT Madras

May 2021 - May 2022

- Single point of contact for 150+ companies that offer 200+ profiles like Consulting, SWE, Analytics etc.
- Succeeded by producing 178 offers amidst the recession due to COVID-19 pandemic by managing a network of 15 coordinators.

Teaching Assistant - Machine Learning Fundamentals IIT Madras

Aug 2022 - May 2023

- Contributed to the ongoing development of the curriculum in a way that promotes a hands-on approach to student learning.
- Conducted weekly programming classes on topics ranging from Neural Networks to GANs, for a class of 50 students. [Material]

PUBLICATIONS

- ♦ Deployment and Explanation of Deep Models for Endoscopy Video Classification <u>K Vikas Mahendar</u>, Chandrasekhar Lakshminarayan, Arun Rajkumar, Varun Sheshadrinathan Third Conference on Deployable AI (DAI), 2023
- ♦ DeepSIFT: Rethinking Domain Generalization via Invariant Input Representations A Dravid*, <u>K Vikas Mahendar*</u>, Yunhao Ge, H Behl, M Varma, Y Rawat, A Katsaggelos, N Joshi, V Vineet Computer Vision & Pattern Recognition, 2023
- ♦ Real Electrical Signals to Text Vishal Nandigana*, <u>K Vikas Mahendar*</u> International Journal of Advance Research, Ideas and Innovations in Technology (IJARIIT), 2021

ACHIEVEMENTS & AWARDS

- National 2nd, Conference Speaker Datathon Indian Symposium on Machine Learning (IndoML) Conference, 2022
- National Winner All India Flipkart Grid 2.0 Software Challenge, 2020
- Silver Medal, International Kaggle Deep Learning Colleridge Show US the Data, 2021
- 16th place, International International Data Analytics Olympiad (IDAO) Data Science, 2021
- National Winner American Express Campus Challenge, 2021
- National Winner Indian Innovation Growth Programme (IIGP 2.0) + Microsoft Code-Fundo Challenge, 2019

EXTRA CURRICULAR ACTIVITIES

- Association of People with Disability (APD), NGO Provided technical assistance on projects for the disabled
- Vaazhvi, NGO Part of the 20 member team to feed the poor and support education for the needy
- Shaastra (IITM) TechFest Volunteered to conduct and organize events and hackathons