Oikantik Nath

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EDUCATION

2022–On	MS+PhD in Computer Science and Engineering Advisor: **Mitesh M. Khapra**	**IIT Madras** CGPA: **8.57**
2017–2021	B.Tech in Computer Science and Engineering Advisor: **Mitesh M. Khapra**	**IEM Kolkata** CGPA: **9.4**

EXPERIENCE

2024–On **AI4Bharat, IIT Madras**
PhD Researcher
Working on building and evaluating multilingual OCR and document understanding models for Indic languages, with a focus on assessing Vision-Language Models (VLMs) for text recognition and handwritten mathematical reasoning.

2022–2024 *MS Researcher*
Worked on developing document layout parsing models as a foundational step toward robust document understanding for Indic languages.

PUBLICATIONS

2025 **Can Vision-Language Models Evaluate Handwritten Math?**
<u>Oikantik Nath</u>, Hanani Bathina, Mohammed Safi Ur Rahman Khan, Mitesh Khapra
63rd Annual Meeting of the Association for Computational Linguistics, Vienna, Austria

2025 **IndicDLP: A Foundational Dataset for Multi-Lingual and Multi-Domain Document Layout Parsing**
<u>Oikantik Nath</u>, Sahithi Kukkala, Mitesh Khapra, Ravi Kiran Sarvadevabhatla
19th International Conference on Document Analysis and Recognition, Wuhan, China
🏅 BEST STUDENT PAPER RUNNER-UP AWARD

PROJECTS

Jul'24-'25 **IndicDLP**

Built a massive-scale, annotated dataset of 220K document images in 22 Indian languages with layout parsing and OCR annotations.

Jul-Dec'24 **FERMAT**

Designed a benchmark to evaluate handwritten math reasoning in VLMs through fine-grained perturbations.

Jul-Dec'24 **Synthetic Document Generation Pipeline**

Developed a large-scale synthetic data pipeline to ingest multi-lingual documents and synthesize Indic-language versions with preserved layouts, creating paired OCR annotations for supervised model fine-tuning.

AWARDS

2025 Awarded the Best Student Paper Runner-up Award at ICDAR'25, Wuhan, China.

2023 Best Teaching Assistant Award for Deep Learning.

2022 GATE Computer Science Rank 442 out of 90K candidates

PERSONAL PROFILE

Hobbies Reading non-fiction | Sketching and Painting

Languages Bengali | Hindi | English

SKILLS

Programming Python | C/C++ | LaTeX

Deep Learning PyTorch | Lightning

Visualization Matplotlib | OpenCV