

Siddhesh Bangar

Dublin, Ireland • bangars@tcd.ie • +353 899771265 • LinkedIn: in/siddheshbangar

AI Software Developer and Researcher with 1+ years of experience in **developing intelligent systems to address and consult complex issues** for technical clients, as well as a strong background in **data science and analysis**. Proficient in **deep learning** and **computer vision**. **Contributed to a prototype** as a team member at MIDAS Labs, which resulted in a **20% improvement in accuracy** for the client's technical app functionality.

Education

M.Sc. in Data Science

Trinity College Dublin

Dublin 2, Dublin

2023 - 2024

Modules: Data Analytics, Machine Learning, Computer Vision, Text Analytics, Artificial Intelligence, Optimization of Algorithms, Scalable Computing, Security and Privacy, Data Visualization, Applied Statistical Modelling.

Bachelor of Engineering

Vidyalankar Institute of Technology

Wadala, Mumbai

2021 - 2023

Computer Engineering

CGPA – 9.43

Modules: Deep Learning, Algorithm Design, Natural Language Processing, Big Data, Data Warehousing and Mining, Hadoop, Distributed Computing, Data Structures, Database Management, Operating Systems, Cloud Computing.

Projects

RanLayNet: Dataset for Document Layout Detection for Domain Adaptation and Generalization

- Developed an **AI-powered synthetic document generator** proficient in producing documents and generating labels for spatial placements, layout element ranges, and types, **leading to a 20% acceleration** in adapting to various domain documents.
 - Introduced the dataset "**RanLaynet**" tailored for **domain adaptation and generalization**, attaining a **39% and 58% mAP95 score** in scientific documents, thereby enhancing accuracy in handling unseen domains.
 - **Orchestrated a team of 5 individuals**, outlining key milestones and objectives for the research project, resulting in a **20% expedited execution** of the project timeline.
-

Professional Experience

AI DEVELOPER AND RESEARCHER

MIDAS: Multimodal Digital Media Analysis Labs

Indraprastha Institute of Technology, Delhi

May 2022 - June 2023

- **Collaborated with multiple project teams and technical clients** to integrate **AI algorithms** and technologies using **PyTorch** and **TensorFlow**, resulting in accuracy **improvements of up to 10%** through effective stakeholder communication.
 - Applied **deep learning** models in diverse contexts including **computer vision**, and **natural language processing**, with a focus on addressing edge cases. These **efforts led to a 15% faster execution of project milestones**.
 - **Led a team of 8-10 individuals** in conducting extensive experiments and research on **LLMs** and **Transformers**, achieving a **15% reduction in processing time beating to state-of-the-art models** for various use cases in multiple scientific domains.
 - Played a key role in **designing architectural workflows** and **productionizing ML models**. Experienced in working with **large-scale structured and unstructured, multi-media databases**, as well as analytics platforms in Scientific, Medical, and Literature domains.
-

DATA SCIENCE AND MACHINE LEARNING INTERN

TCR Innovation

Thane, India

Jan 2022 - April 2022

- Implemented **mathematical and statistical models** using data analysis and **machine learning** techniques, achieving an accuracy of 85% which contributed 5-10% of client side projects.
 - Conducted **exploratory data analysis and visualization** on a customer churn dataset, identifying key factors contributing to churn and providing actionable insights to reduce churn rate by 15%.
 - Collaborated with **cross-functional teams** to deploy machine learning models into **production environments** and **automation** ensuring scalability and performance optimization.
-

Skills

Programming: Python, R, Java, C, NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch, OpenCV, Postgre SQL, MongoDB.

Data: Machine Learning, Deep Learning, Data Analysis, Artificial Intelligence, Computer Vision, Natural Language Processing.

Software : Data Structures, Algorithms, Debugging, Object Oriented Design, Database Management, SDLC.

Tools & Technologies: LaTeX, Word, Excel, PowerPoint, Markdown, VS Code, Azure, PowerBI, Canva, Photoshop.

Course and Certifications

Google Data Analytics – Coursera

May 2021 - Nov 2021

30 Days of Google Cloud – Google Cloud

September 2021 - October 2021

Machine Learning with AWS – Amazon Web Services (AWS)

May 2021