

MOHITA CHOWDHURY

chowdhury.mohita@gmail.com • Github: [mohiitaa](#) • Website: [mohiitaa.github.io/](#) • LinkedIn: [mohiitaa/](#)

EDUCATION

University of Oxford, Department of Computer Science

Oxford, UK

Master of Science in Computer Science | *Grade: Merit*

Oct 2020

Relevant Coursework: Advanced Machine Learning, Artificial Intelligence

National Institute of Technology Karnataka, Surathkal (NITK)

Surathkal, India

Bachelor of Technology in Electronics and Communication Engineering | *GPA: 9.36/10, Class Rank: 6/110* May 2019

EXPERIENCE

Ufonia

Oxford, UK

Lead AI Research Engineer

Oct 2020 - Present

- Leading AI strategy and R&D to improve Ufonia's conversational AI assistant for autonomous telemedicine. Current focus is on the regulated integration of large language models at low-latency for real-time conversations.
- Leading a clinical trial and managing stakeholders to support multilingual deployment in the Netherlands.
- Reduced deployment time by 60% by streamlining ML training and testing workflows.
- Achieved 98% PII redaction in production data by developing and deploying in-house anonymisation model.
- Developed a self-supervised learning-based approach to improve transcriptions in low-data settings.

Nanyang Technological University Singapore

Singapore

Research Assistant at Hardware and Embedded Systems Lab

May 2018 - Jul 2018

- Designed a computationally inexpensive algorithm to remove false positives from foreground detectors for automated nighttime traffic surveillance, in collaboration with TU Munich ([TUMCreate Project](#)). View results [here](#).

Indian Institute of Technology, Delhi (IITD)

Delhi, India

Research Intern at Samsung Innovation Lab

May 2017 - Jul 2017

- Designed an algorithm to improve image segmentation in cluttered backgrounds by leveraging depth from stereo image pairs. View results [here](#)

SELECTED PUBLICATIONS

- **M Chowdhury***, E Lim*, A Higham, R McKinnon, N Ventoura, Y He, N de Pennington “Can large language models safely address patient questions following cataract surgery?”, Investigative Ophthalmology & Visual Science (an ARVO Journal) 2023 [Abstract], Clinical NLP Workshop at ACL 2023 (*Oral Presentation*).
- OW Gardiner, **M Chowdhury**, E Lim, A Higham, N de Pennington “Can deep learning models understand natural language descriptions of patient symptoms following cataract surgery?”, Investigative Ophthalmology & Visual Science (an ARVO Journal) 2022 [Abstract], Women in ML Workshop at NeurIPS 2022. [Poster]
- **M Chowdhury**, OW Gardiner, Y Miao “A Simple Phoneme-based Error Simulator for ASR Error Correction”, Women in ML Workshop at NeurIPS 2022. [Poster], RelKD Workshop at KDD 2023 (*Spotlight Presentation*).
- **M Chowdhury**, H Shah, T Kotian, N Subbalakshmi, SS David, “Copy-Move Forgery Detection using SIFT and GLCM-based Texture Analysis”, TENCON - IEEE Region 10 Conference 2019. [Paper]

ACADEMIC PROJECTS

Zero-shot Human-Object Interaction Detection (ZS - HOID)

Apr 2020 – Sept 2020

- Invented VLS-Net, a model that combines visual, spatial and language modalities and recognises interactions in fully-supervised and zero-shot settings. Surpassed state-of-the-art methods by 8% mAP on 120 zero-shot compositions from the HICO-DET dataset.

Robust Copy-Move Forgery Detection under Multiple Geometrical Transformations

Jul 2018 – Apr 2019

- Devised a framework for robust detection of copy-move forgeries in images. Reduced false positives from 56% to 34.34% on the COVERAGE dataset.

SKILLS

Programming Languages: Python, C++, C, TypeScript

Tools and Frameworks: PyTorch, TensorFlow, GCP, AWS, SciPy, Pandas, LangChain, HuggingFace, Docker, K8s

RECOGNITION AND AWARDS

- Oxford and Cambridge Society of India Scholarship. 2019
- NTU-India Connect Scholarship. 2018