

Professional summary

Final-year PhD candidate in Artificial Intelligence in Medicine at the University of Brescia, with a strong focus on AI applications in healthcare and medical imaging. Specialized in developing machine learning and computer vision models for spinal imaging and clinical risk prediction. Experienced in interdisciplinary research and international collaboration, including a 3-month research visit at the Center for Digital Health Implementation Science in Ethiopia, focusing on AI deployment in resource-limited clinical settings, and a 6-month tenure at the NYU Video Lab, working on advanced computer vision techniques for spine pathology detection. Proven ability to bridge clinical needs with technical innovation, with a track record of developing AI tools that support diagnostic workflows and improve clinical decision-making.

Education

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| UNIVERSITY OF GONDAR | Gondar, Ethiopia |
| BSc in Electrical and Computer Engineering | 2012 - 2016 |
| <ul style="list-style-type: none">Specialized in Electrical signals, signal analysis and synthesis, computer architectures and communication engineering principles. | |
| UNIVERSITY OF BRESCIA | Brescia, Italy |
| MSc in Communication technologies and multimedia | 2019 - 2022 |
| <ul style="list-style-type: none">Communication technologies and multimedia processing including, image, audio and video processing | |
| UNIVERSITY OF BRESCIA | Brescia, Italy |
| Ph.D, AI in Medicine | 2022 - Present |
| <ul style="list-style-type: none">Development of AI models for healthcare application that can assist physicians on decision making and diagnosis process. | |

Experience

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| UNIVERSITY OF GONDAR | Gondar, Ethiopia |
| Assistant Lecturer | Aug 2016 - Aug 2019 |
| <ul style="list-style-type: none">Course instructor for Bachelor students under the department of Electrical and computer engineering. Courses delivered: Introduction to computer programming (C++), Digital Logic Design, Introduction to communication engineering, Fundamental of circuit theoryCollaborated with cross-functional teams to implement community service and technology transfer projects. | |
| Center for Digital Health and Implementation (CDHI) | Addis Ababa, Ethiopia |
| Visiting PhD student | Sept 2024 - Dec 2024 |
| <ul style="list-style-type: none">Collaborate on system implemenation, AI model API configuration, UI design. | |
| NEW YORK UNIVERSITY | New York, USA |
| Visiting PhD student | Apr 2025 - Present |
| <ul style="list-style-type: none">Lead a project on the development of computer vision algorithms, on medical imaging. | |

Skills

Technical: Machine Learning, Natural Language Processing, Reinforcement Learning, Python, TensorFlow, AI Ethics, Medical Imaging, Digital Health, Medical Image Analysis