

Personal Information	DOB : 6 th Mar 1984 Sex : Male Nationality : Indian Experience : 16 years (10 years in Industry and 6 years in Academics)
Summary	I am a passionate researcher and engineer having over 10 years of industry and 6 years of academic research experience. My primary research areas include case-based reasoning and artificial intelligence for Healthcare and Agro-Food Processing applications.

Education

Ph.D. 2017 — 2025	PhD in Computer Science (AI) NTNU, Trondheim, Norway; https://www.ntnu.no/idi Assessed by Dr. Ian Watson, Emeritus Professor, University of Auckland, New Zealand and Dr. K.S.N. Ripon, Associate Professor, Oslo Metropolitan University, Norway PhD Defense: “The candidate maintained the time well, and the presentation was well organised. The candidate understood and answered the questions from the opponents well, using suitable practical examples. He discussed the topics extensively and demonstrated a broader understanding of the field.” PhD Thesis: “The thesis presents a novel contribution to federated architecture in CBR for healthcare. The work has a good quality. The candidate presents several original ideas, including similarity models improving retrieval accuracy in CBR-driven decision support and a scalable microservice-based CDSS.”
M.S. 2007 — 2009	Master Degree in Medical Software Manipal University, Manipal, Karnataka, India; http://manipal.edu/mu.html Master of Science (M.S.), with the highest level of distinction as “First class with Distinction”. CGPA (Cumulative Grade Point Average) : 8.51
B.E. 2003 — 2007	Bachelor Degree in Medical Electronics Visvesvaraya Technological University, Karnataka, India; http://vtu.ac.in Bachelor of Engineering, with the highest level of distinction as “First class with Distinction”. Overall percentage score : 73.41%

Work Experience

Norwegian Center for E-health Research Tromsø, Norway 2021 and 2023	Healthcare Analytics research group, □ ASCLEPIOS project (2021) □ SNOW project (2023)
Ricoh Healthcare (Telemedicine) Bangalore, India 2014 — 2017	Remote Healthcare System, platform development R&D group □ Business Rule Engine for Ricoh Healthcare global platform (2017). □ REST-based Audit Trail server implementation based upon Elasticsearch (Lucene) platform, with generic query language developed on Antr. (2016) □ HL7 V2 engine web-service development with dynamic conformance adaptability for Ricoh’s Remote Healthcare solution. (2014-2015) □ Electronic Prescription Solution based upon DoseSpot for US Market. (2015-2016)
Philips Healthcare (X-Ray Scanners) Bangalore, India 2011 — 2014	X-Ray platform and Mammography R&D group □ Implemented auto-detection of Cardiomegaly using Fuzzy C-means Clustering Algorithm for chest PA view X-Ray images. □ Implemented SMARt project used for consistent visual appearance in all Philips X-Ray Products for different monitor resolution and display systems.
GE Healthcare (CT - PET Scanner) Bangalore, India 2008 — 2011	CT &PET Scanners platform development and R&D group □ Implemented automatic triggering of CT Scan acquisition for SmartPrep application, based upon real-time ROI contrast tracking. □ Porting of PET Scanner Diagnostic Acquisition to Java, used for PET Scan R&D.

Academic Publications

NTNU (PhD thesis) 2025	A. Jaiswal, "Leveraging Knowledge and Data-Driven Approaches in Case-Based Reasoning to Aid Physiotherapists Addressing Non-Specific Musculoskeletal Disorders - An Applied Research ", Ph.D. thesis, Norwegian University of Science and Technology (NTNU) (2025).
IJMI (journal) 2025	A. Jaiswal, M. Kumar, and I. Meisingset, "SupportPrim CDSS: A Clinical Decision Support System Architecture Based on Microservices for Non-Specific Musculoskeletal Disorders", International Journal of Medical Informatics (IJMI) 200, xxx-xxx (2025) (Accepted).
IEEE Access (journal) 2024	A. Jaiswal, M. Kumar, A. R. Pathak, K.Y. Yigzaw, "FaN-REMs: Fair and Normalized Retrieval Evaluation Metrics for learning retrieval systems", IEEE Access 12, 195370-195395 (2024).
JMIR (journal) 2024	F. Granviken, O. Vasseljen, K. Bach, A. Jaiswal, I. Meisingset, "Decision support for managing common musculoskeletal pain disorders: Development of a case-based reasoning application", JMIR Formative Research 8, e44805 (2024).
IEEE ACCESS (journal) 2022	A. Jaiswal, K. Y. Yigzaw, and P. Öztürk, "F-CBR: An Architecture for Federated Case-Based Reasoning," IEEE Access 10, 75458-75471 (2022).
ICCBR (conference) 2019	A. Jaiswal and K. Bach, "A data-driven approach for determining weights in global similarity functions," in Case-Based Reasoning Research and Development - 27th International Conference. Springer, 2019, pp. 125–139.
FLAIRS (conference) 2019	A. Jaiswal, K. Bach, I. Meisingset, and O. Vasseljen, "Case representation and similarity modeling for non-specific musculoskeletal disorders - a case-based reasoning approach," in Proceedings of the Thirty-Second International Florida Artificial Intelligence Research Society Conference (FLAIRS). AAAI Press, 2019, pp. 359–363.
ICCBR (workshop) 2019	K. Bach, B. M. Mathisen, and A. Jaiswal, "Demonstrating the mycbr rest api," ser. CEUR Workshop Proceedings, vol. 2567, 2019, pp. 144–155.

Academic Research

PhD Research	Ph.D. Research at NTNU, Norway. https://www.ntnu.no Supervisors: Dr. Pinar Öztürk and Dr. Ingebrigt Meisingset An applied research to designed and developed, from scratch, the backend of the SupportPrim clinical decision support system (CDSS) (https://www.ntnu.no/supportprim/om) from 2017 to 2021. The CDSS is based on case-based reasoning (CBR) that assists physiotherapists in co-decision making and treatment planning for musculoskeletal disorder (MSD) patients. The developed CDSS was leveraged for Randomised Control Trail (RCT) in Norway.
M.S. Projects 2007 - 2009	Master Project at Manipal University. http://manipal.edu/mu.html Facial Feature-Based Computer Navigation: Developed on java platform to interact with computers via facial features, such as long duration left and right eye blinks to imitate left and right mouse clicks with nose tip movement for mouse pointer coordinates using SSR filter. Motion Estimation of Cineangrographic Images, the blood flow analysis based on flow vectors in adjacent image frames, by Block matching algorithm
B.E. Project	MSRSAS (M.S. Ramaiah School of Advanced Studies, Bangalore, India) Software Modelling of Prosthetic Knee under the guidance of Dr. M.D. Deshpande.

Training / Short-Term Courses

ITIE Academy 2016 — Till Date	Undergoing refresher course on Image Processing since 4 month and involved in various Image Processing Projects. http://www.itie.in/ & http://itieacademy.com/
Endolite India 2006 — 2007	One month training at Endolite India Bangalore, under the guidance of Mr. A Antony, focused on basics of prosthetics and human Gait-Cycle and need of bionics.
Hospital Training 2006 — 2006	Medical Equipment and its operation training by Hosmat Hospital Bangalore, involving MRI Scanners, CT Scanners, Neuro-Navigation Surgeries, C-Arm assisted orthopedic surgeries. http://hosmatnet.com/

Skills

Technical	Microservices, CBR, Elasticsearch, HL7 (V2), e-Prescribing, HIPAA, Architecture.
Programming Languages/scripts	Java (proficient), Python, C, C++, JavaScript, xml, json, Spring, REST Client, SOAP, Webservices.
Tools / Software	myCBR, Elasticsearch, Spring Boot, Eclipse and IntelliJ IDE, Rational Clearcase, Github.

Recognition / Awards

You Did It!	Philips X-Ray roadshow 2011 for my contribution in Cardiomegaly project.
Best Idea Discloser	Automatic CT Gantry iso-centering, Static CT Gantry Design, Within PET- CT Team.
Best Project / Student	Software Modeling of Prosthetic Knee, for batch of Medical Electronic (B.E.)
Best Presentation	For Fetal Monitoring System, Neuro-Navigation Surgery, Talk on EEG & Sleep.

Additional Information

Co-Founder 2023 — 2025	Avadh Premium International LLP is establishing a state-of-the-art dehydration manufacturing facility in rural Ayodhya (Hathigo, Bikapur), focusing on PREMIUM quality dehydrated vegetables and fruits (powder, chunks, flakes), alongside wood-pressed edible oils and jaggery products. The goal was to leverage advanced processing technology to maintain high hygiene standards to preserve maximum nutritional value, flavor, and shelf-life of each product. This initiative aims to foster local employment and forge direct partnerships with farmers, emphasizing community growth and sustainable
Optical R&D 2012 — 2017	Successfully started a personal setup for R&D in manufacturing Optical Frames from biodegradable and eco-friendly materials .
Founder 2003 — 2009	Started Optical Frame distribution company in 2003, still running successfully, currently owned by my family, with employee strength of 15 as per latest record. Currently run by my younger brother in Bangalore, India .
Technical Interests	Applied Research , Healthcare, Artificial Intelligence, Agro-Food Processing .
Hobbies	Teaching and implementing projects, sketching (portraits), reading, travelling, finding reasons behind various superstitions & observing nature and its reasons.