MAUNG THANT

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Personal Website

LinkedIn

EDUCATION

KU Leuven, Belgium

MSc. - Artificial Intelligence

Sep. 2024 - Sep. 2025

CGPA: 76.17/100

Thesis: Globally and Locally Aligned Self-supervised Representation Learning in Multi-modal Medical

Decision Support Systems Advisor: Prof. Bart De Moor

Grade: Less than 1% below Magna Cum Laude

MSc. - Electronics and ICT Engineering Technology Sep. 2022 - Feb. 2024

Thesis: Vision-based Robotic Grasp Pose Estimation with Screw Constraints for Electronic Devices

from Conveyor Belt

Advisor: Prof. Jef Peeters

Grade: Cum Laude CGPA: 70/100

BSc. - Engineering Technology Sep. 2019 - Sep. 2022

Thesis: Health Monitor System for Detecting and Predicting Asthma Attacks

Grade: Cum Laude CGPA: 68/100

University of Medicine 1

Yangon, Myannmar Sep. 2018 - Aug. 2019

MBBS. - Bachelor of Medicine, Bachelor of Surgery

Transferred out to study at KU Leuven

PUBLICATIONS

Vision-Based Robotic Grasping with Constraints for Robotic Demanufacturing [Paper] [Poster]

Mohammad Mahin Shoaib, <u>Maung Thant</u>, ChuangChuang Zhou, Jef Peeters, and Karel Kellens. In 2024 Electronics Goes Green 2024+ (EGG). IEEE, 2024.

RESEARCH EXPERIENCES

Research Assistantship

Department of Computer Science, KU Leuven

Jul. 2025 - Sep. 2025

Leuven, Belgium

• Implemented OCR AI models for automating biospecimen documentation in a museum digitization pipeline, using SAM Meta, YOLO11s-OBB, docTR, Open-OCR, and Tr-OCR. Created a neural baseline for comparisons with neuro-symbolic methods in Prof. Luc De Raedt's lab.

Polyphonic Music Transcription Through Spatial Audio Recording Sep. 2022 - Feb. 2023 [Paper]

- Advisor: Prof. Toon van Waterschoot
 - Researched on spatial separation, note onset detection, and pitch estimation of musical instruments recorded via a circular microphone array in mock music therapy sessions. The complete pipeline is evaluated using data obtained from recordings of mock group music therapy sessions.

PROFESSIONAL EXPERIENCES

Full-stack Software Developer

Mindspeller

Feb. 2024 - Jul. 2024 Herent, Belgium

• Developed front-end and back-end components to clean and process user survey data, integrating with the company's database using Python, HTML, CSS, and SQL.

Data Scientist

Jul. 2023 - Sep. 2023

Access-To-Medicines, Faculty of Economics and Business, KU Leuven

Leuven, Belgium

 Developed an interactive data visualization interface linked to a database at the research lab of Prof. Nico Vandaele. Migrated statistical code from R to Python and integrated it into the interface.

EXTRA-CURRICULAR EXPERIENCES

Deep Learning Engineer

Emergent Leuven

Oct., 2024 - Jan. 2025

Leuven, Belgium

• Fine-tuned and implemented Keras-OCR AI model to detect text from video game images for the project client Say It Labs. Extracted text was used for synthetic pronunciation in speech therapy applications.

Deep Learning Engineer

Emergent Leuven

Mar. 2024 - Jul. 2024

Leuven, Belgium

• Fine-tuned and deployed a YOLOv8 model for traffic signs detection for the project client Innoptus Solar Team (Current World Champion). The model was used in South Africa to automate traffic signs and speed limit data collection, supporting route planning and race strategy.

Machine Learning Engineer

NeuroTech Leuven

Jul. 2023 - Jul. 2024

Leuven, Belgium

- Implemented a feature extractor and gradient-boosted classification pipeline for real-time EEG based recognition of four emotions during gameplay of "The Witcher 3". In-game weather and environment adapted dynamically to player emotions.
- Demo: YouTube Link.

Business Relations

NeuroTech Leuven

Jul. 2023 - Jul. 2024

Leuven, Belgium

• Led the Business Relations team, coordinating outreach and meetings with local and international companies to secure partnerships, sponsorships, and collaborations. Helped with organizing the MindSeed 2024 event. [YouTube Link] [Faculty news]

Member of International Function

Industria vzw

Jul. 2020 - Jul. 2021

Leuven, Belgium

• Organized social and exam-prep events for international and first-year students at Campus Group T, KU Leuven.

TEACHING ASSISTANT EXPERIENCES

Artificial Neural Networks and Deep Learning (H02C4A, Graduate) Feb. 2025 - Jun. 2025 KU Leuven Leuven, Belgium

• Instructed and guided weekly exercise sessions for over 150 international students, covering foundational and advanced neural network concepts under the supervision of Prof. Johan Suykens.

Support Vector Machines: Methods and Applications (H02D3A, Graduate) Apr. 2025 -

 $Jun.\ 2025$

KU Leuven, Belgium

• Instructed and guided weekly exercise sessions for over 100 international students on theoretical and applied aspects of SVMs under the supervision of Prof. Johan Suykens.

Introductory course of Mathematics

Sept. 2023 - Oct. 2023

KU Leuven

Leuven, Belgium

• Instructed and guided weekly exercise sessions for over 200 international students on basic concepts in linear algebra and calculus under the supervision of Prof. Toon van Waterschoot.

Fundamentals of Mathematics (T1AWB2, Undergraduate)

Sept. 2022 - Jan. 2023

KU Leuven

Leuven, Belgium

• Instructed and guided weekly exercise sessions for over 60 international students in linear algebra and calculus fundamentals under the supervision of Prof. Toon van Waterschoot.

Electronic Circuits (T1ESCE, Undergraduate)

Feb. - Jun. 2021, 2022, 2023

KU Leuven, Belgium

• Instructed and guided weekly exercise sessions for over 60 international students in circuit analysis and electronics under the supervision of Prof. Lucca Geurts.

INVITED TALKS

Globally and Locally Aligned Self-supervised Representation Learning in Multi-modal Medical Decision Support Systems

Jun. 2025

[Slides]

• Presented at the research group meeting of Prof. Yves Moreau.

AWARDS AND HONORS

First Place - Learning Garage of KU Leuven	Mar. 2023
First Place - R&D Experience Project Competition (T47UXW)	Feb. 2023
Erasmus+ Scholarship	Sep. 2021 - Feb. 2022

• Completed a semester abroad at Politecnico di Torino under the Erasmus+ Traineeship Program.

SKILLS

Computer Programming Python, C, C++, Matlab, Java, HTML, Javascript

Deep Learning Tools PyTorch, Tensorflow

Soft Skills Leadership, Communication, Team Work, Work Ethic

Languages Myanmar (Native), English (Fluent)

HOBBIES

Books Odyssey (Homer), Iliad (Homer), Paradise Lost (John Milton), The Divine Comedy (Dante)

Sports Swimming

MEDIA