## MAUNG THANT

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Personal Website 

LinkedIn

#### **EDUCATION**

KU Leuven, Belgium

MSc. - Artificial Intelligence

Sep. 2024 - Sep. 2025

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

Decision Support Systems [Thesis] [Slides]

Advisor: Prof. Bart De Moor

Grade: Less than 1% below Magna Cum Laude

CGPA: 76.17/100

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 [Thesis] [Slides]

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 [Video]

Advisor: Prof. Lucca Geurts

Grade: Cum Laude CGPA: 68/100

#### University of Medicine 1

Yangon, Myannmar

MBBS. - Bachelor of Medicine, Bachelor of Surgery

Sep. 2018 - Aug. 2019

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

Nov. 2025 - Present

Remote

• Conducting research on continual model selection for tool learning in continual learning systems under the supervision of Prof. Vincenzo Lomonaco.

#### Research Assistantship

Jul. 2025 - Sep. 2025

Department of Computer Science, KU Leuven

Leuven, Belgium

Developed an OCR-based system to automate biospecimen documentation for museum digitization, evaluating multiple models (SAM Meta, YOLO11s-OBB, docTR, Open-OCR, Tr-OCR) and integrating template matching, Levenshtein distance, and custom data labeling. Established a neural baseline to benchmark against neuro-symbolic approaches under the supervision of Prof. Luc De Raedt.

#### Research Assistantship

Department of Electrical Engineering (ESAT), KU Leuven

Sep. 2022 - Feb. 2023 Leuven, Belgium

• Conducted research on spatial separation, note onset detection, and pitch estimation of musical instruments recorded with a circular microphone array for automatic polyphonic music transcription. Evaluated the pipeline using recordings from mock group music therapy sessions under the supervision of Prof. Toon van Waterschoot. [Paper]

#### PROFESSIONAL EXPERIENCES

### Full-stack Software Developer

Feb. 2024 - Jul. 2024

Mindspeller

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

Oct., 2024 - Jan. 2025

Emergent Leuven

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

Mar. 2024 - Jul. 2024

Emergent Leuven

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

Jul. 2023 - Jul. 2024

NeuroTech Leuven

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.

#### **Business Relations**

Jul. 2023 - Jul. 2024

NeuroTech Leuven

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] [Faculty news]

#### Member of International Function

Jul. 2020 - Jul. 2021

Industria vzw

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 (Introductory Course) KU Leuven

Sept. 2023 - Oct. 2023 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) KU Leuven

Sept. 2022 - Jan. 2023

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) KU Leuven Feb. - Jun. 2021, 2022, 2023

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 ProgrammingPython, C, C++, Matlab, Java, HTML, JavascriptDeep Learning ToolsPyTorch, TensorflowSoft SkillsLeadership, Communication, Team Work, Work EthicLanguagesMyanmar (Native), English (Fluent)

#### **MEDIA**

Thant Maung Discovers the Metaverse and Wins [Campus Magazine]